

PERSONALITIES

By George F. Taubeneck

Common Denominator

Although the Kelvinator Mystery Cruise (we promise solemnly not to talk about it after this week) was supposed to be a pleasure trip, we couldn't resist the temptation to make a nuisance of ourselves and try to pick up—and put together—a few facts about these champion salesmen and how they operate.

Following is an attempt to analyze quickly, dissect briefly, and arrive somewhere near a common denominator of these winners.

60 Calls Per Day!

The average number of prospects interviewed by these men ran from three to 10 daily. One salesman, however—29-year-old THOMAS YARDELL, of the El Paso Electric Co., El Paso, Tex.—insists that he interviews between 15 and 60 per day.

Mr. Yardell believes a sales policy varies according to the individual. "Rules for selling refrigerators," remarks this man, "depend largely on the particular prospect."

J. N. NEWMAN (who is almost twice Mr. Yardell's age) of Cleveland Furniture Co., Cleveland, Tex., is of the same opinion as Mr. Yardell.

"Every prospect presents a new problem," declares Mr. Newman, "but I believe a salesman should present honest, earnest arguments and have a thorough understanding of his unit. After the sale is made, the salesman should make regular follow-up calls."

Frozen Dessert

Food preservation, economy, sanitation, keeping up with the Jones', and pride of ownership, were the usual reasons given by the salesmen when asked why people buy refrigerators. WARD S. CRAWFORD, Consumers Power Co., Grand Rapids, Mich., was the only one to mention dessert freezing as a chief reason.

He is 43, and has been selling refrigerators almost four years.

HAROLD R. OLSON of St. Paul, Minn. (wouldn't you expect an Olson to come from St. Paul?), thinks the most important rule to follow in selling refrigerators is to "Be Patient."

He is 40 years old, has been selling refrigerators but two years, and still has sold enough boxes in his territory that users provide his prospect list.

Both Crawford and Olson report that larger boxes (sixes and sevens) have been selling best this year.

Don't Knock

Three men agree on the same two rules for successful selling.

"Stick to your own product. Do not knock your competitor," says E. H. (TED) WILSON (44), of the Southwestern Gas & Electric Co., Shreveport, La.

"Talk of your own product, not your competitor's," stated H. E. YOUNG (39), of Ott Hardware Co., Santa Barbara, Calif., and "Never knock—know your product, and tell the customer all you know," declares CARLETON V. CLARK (35), of Clark & Humphrey, Bradford, Pa.

All the salesmen on the boat, in fact, seemed agreed on those two points—even if they didn't emphasize them particularly in their discussions of what constitutes good salesmanship.

Follows Ice Man

Honest selling, a boost for the other fellow, and an occasional visit

after the sale has been made are the three prime requisites for selling, believes JOSEPH R. SORENTO of Sorento Bros., Boston, Mass.

Satisfied users and "following the ice man" are the best mediums of obtaining prospects, Mr. Sorento has found.

As for this latter method, this enterprising salesman jots down the numbers of the houses which take large cakes of ice, and rightly presumes that they need a good-sized electric refrigerator. Then he calls on them.

Interestingly enough, he takes very few ice boxes in on trade. He is 33 years old, and has been selling electric refrigerators for four years. Also he sells washers and oil burners.

Tea Room Lectures

FULTON CAIRN of Kreimer & Bros. Co., Cincinnati, has an unusual method of contacting prospects. He gives tea room lectures daily to 120-140 individuals, of which approximately 30 to 50 per cent are ice-box users. Almost 65 per cent of Mr. Cairn's sales this year have been made on the basis of ice-box trade-ins.

"The tea room lectures are a good door opener," said Mr. Cairn. "I believe in selling Kelvinator and not terms. I state facts, and am enthusiastic enough that the customer knows I know what I'm talking about."

"I interview from four to 10 prospects a day. It isn't how many you see; it's what you do with those you contact," stated Mr. Cairn.

In selling a larger refrigerator to a prospect for a smaller one Mr. Cairn stresses the fact that "unless you have size, you cannot save through quantity buying. There is very little additional cost of operation for a larger model. It's usually the first 4 cu. ft. that are the most expensive."

Play Ball with Users

"We promise a crisper or dishes to a user if she gets another sale, and we fulfill the promise," states BRAXTON TABB of Peoples Supply Co., Highland Springs, Va. The effectiveness of this method is shown in Mr. Tabb's declaration that the prospect list is composed mainly of names turned in by users and those obtained from store demonstrations.

Mr. Tabb believes in following up a sale to see if the product is entirely satisfactory and rendering prompt and efficient service.

Bigger Dividends

W. E. BROOKS (age 31) of Begwell Radio Co., Kilgore, Tex., gets most of his prospects through contacts on the floor, and through users and their friends.

This man frames his policy briefly as follows: "Get prospects, cultivate their confidence in you, your store, and product. After sale has been made, constantly render courteous service to owners in order to get new prospects."

In selling a larger model refrigerator in place of a smaller one, Mr. Brooks stresses the argument: "the more storage space the bigger the dividend the buyer receives on his investment. Due to adequate storage space, week-end bargains from grocery and meat market may be preserved."

"Constantly rendering courteous service to owners so as to get new prospects" is the No. 1 rule of his business conduct.

Planned Work

A. J. R. SEYFERT, field man for the Morley Murphy Co., distributor in Green Bay, Wis., went epigrammatic when he stated his sales motto: "Work Planned—and Planned Work."

"I use a scrap book and testimonials, with photos of installations when working with retail men."

Watching the marriage license bureau reports, canvassing, and interviewing people who have been sold other appliances through his dealers comprise Mr. Seyfert's chief source of prospects for his retail operations.

Although but 34 years of age, Mr. Seyfert has been selling—or helping to sell—electric refrigerators for six years.

Two Different Types

"Stay on the hot prospect!" is the terse motto of FRANKLIN C. SCHLETT (age 28) of Schlett Hardware Co., Springfield, Ill.

Equally brief is the creed of A. F. PASCHKE of King Lumber Co., Grand Rapids, Minn.—"Do not over-sell!"

Both men agree the best source of prospects is users. Both agree people buy refrigerators because of convenience and thrift. Mr. Paschke adds health and sanitation to the list, while Mr. Schlett says "keeping up with the Joneses" is a leading motive for buying.

Mr. Paschke states it takes him about two calls, on the average, to close a sale, while Mr. Schlett declares he requires approximately 10 calls. And they both sell lots of refrigerators!

Never Give Up

"Never be so in need of a sale that you misrepresent," and "Use the user" are prime rules for selling refrigerators, according to R. N. MOORE of Pearson Co., Inc., Indianapolis.

"I never give up a sale until the prospect buys electric refrigeration. People buy refrigerators because they are convinced that the story of economy and convenience salesmen have been telling for 20 years is true," states Mr. Moore.

When selling a larger refrigerator to a user, Mr. Moore finds out if the present ice box is large enough for the family, and then tries to sell a Kelvinator with twice the "stuff space."

About 85 per cent of Salesman Moore's sales have had ice box trade-ins in proportion to 5 per cent electric refrigerator trade-ins.

Ask 'Em Why

JACK LEVY, crack salesman of Georgia Power Co., Atlanta, believes in asking the prospect outright what his reason is for not buying.

"When prospects say 'no,' I ask them why. Then I know what objection to hammer on," said Mr. Levy.

Sales motto of Mr. Levy is "Sell the first one right, then you can refer a neighbor or friend to the buyer."

Health Appeal

"Stress the importance of an electric refrigerator to health and the fact that it will pay for itself" is the selling credo of DWIGHT L. GRIBBLE of the Taylor Furniture Co., Columbia, Mo.

Approximately 80 per cent of Mr. Gribble's sales this year have been made with ice-box trade-ins.

"Most people gauge their needs by the size of the ice box they are using," stated Mr. Gribble. "I point out additional uses of electric refrigeration, which would require more space, and thus try to sell a larger refrigerator to the prospect."

He Never Quits

CHARLES E. FAUGHT of Faught Music & Radio Co., Glasgow, Ky., never gives up hope of selling a prospect.

"If they buy something else," averred Mr. Faught, "they will sooner or later exchange it for a Kelvinator."

Mr. Faught believes in making a refrigerator give satisfaction and maintains service. He finds his best source of prospects in the users.

See More People

E. T. MOORE of Florida Power Corp., St. Petersburg, Fla., believes wholeheartedly in seeing more people and seeing them often.

"I try to let every personal acquaintance know I sell refrigerators and solicit their help in securing prospects. I ask those whom I patronize to patronize me," declared Mr. Moore.

Chief arguments advanced by Mr. Moore for selling larger refrigerators are: "Get a refrigerator that will be big enough several years from now. A larger box gives more cubic feet per dollar invested. You can keep more variety on hand, buy in larger quantities, and keep foods longer."

Don't Let Him Know

"I take the fear of the future out of a customer's mind and sell him without letting him know he is being sold," observes I. R. JOHNSTON of Coeur d'Alene, Idaho.

Honesty, truthfulness, knowing your product, and telling your story plainly and completely are prime requisites in selling refrigerators according to Mr. Johnston, who never gives up a sale until a prospect sells him on the fact that he is "dead."

H. F. CASTEEL of W. A. Green Co., Dallas, Tex., sums up the canons of good salesmanship succinctly as follows: "The right product, proper sales presentation, perseverance plus, and consistent work."

This 43-year-old salesman does some of his best work following up leads developed from store traffic.

Two Youngsters

The two "babies" on the trip were CHARLES B. MOYER of Doyleston, Pa., who is but 20 years old, and J. W. GARLOCK of Fort Dodge, Iowa, who is just 22.

In spite of his tender years, Mr. Moyer claims he has been selling refrigerators since 1927! His chief source of prospects is the record of the local marriage license bureau. Rarely does it take him more than three calls to close a sale.

Like most of the salesmen—all are contest winners, remember—Messrs. Moyer and Garlock believe thoroughly in the efficacy of sales contests, and attribute part of their success to the stimulation of these extra incentives.

Know Competitors

Sales creed of RALPH J. BAKER of Arthur J. Dillman & Son, Inc., Caruthersville, Mo., is "Tell the truth, never make false claims, have a good sales talk, know your competitor's boxes, and never give up."

Mr. Baker makes evening calls, watches the marriage columns, scans the local news, and tries to profit by his competitors' mistakes.

Dead and Buried

Store and church demonstrations are the special sales methods used by HERBERT BROWN of Dabney & Bugg, Richmond, Va. Mr. Brown has been selling refrigerators for 14 years, and believes people buy refrigerators for reasons of economy of operation, convenience, and preservation of food.

Salesman Brown never gives up a prospect until he is "dead and buried or has purchased a box."

Card Record

B. F. PRICE of Price Electrical Appliance Co., East Liverpool, Ohio, keeps a card record of all prospects. On these cards he notes all statements made by the prospect that have any bearing on the sale.

Immediately before the final call to close the deal, Mr. Price refers to the card index to refresh his memory.

Mr. Price believes a salesman should make a proposition to the prospect in such a way that the client will understand exactly just what he is to get and how and when and how much he is to pay.

Brevities

Salesmanager R. I. PETRIE was almost universally admired and liked by the salesmen and dealers on the cruise. They said so, privately and publicly, many times. A lineal descendant of a onetime President of the United States, JAMES K. POLK, was one of the party. His name is GRAHAM POLK, and he hails from Fort Worth, Tex. . . . WALTER JEFFREY, Kelvinator campaign manager, was in charge of the trip from beginning to end, and handled every detail beautifully. In appreciation, the Texas delegation presented him with a 10-gallon hat; and the rest of the passengers chipped in on a cash present which was given him just as the boat docked in Detroit. . . . MEL PETERS of Lincoln, Neb., declares that he watches the mail box every week, and grabs ELECTRIC REFRIGERATION NEWS as soon as it arrives. Always, he says, it contains at least one tip he can use in selling. . . . R. U. LYNCH of the Post & Lester Co., Kelvinator and Atwater Kent distributor in Providence, R. I., declares he reads only two publications regularly: ELECTRIC REFRIGERATION NEWS and Time. . . . One of his dealers, WILLIAM BESEROSKY of the Standard Electrical Co., New Bedford, Mass., claims he has shown ELECTRIC REFRIGERATION NEWS to 1,000 prospects. Copies containing Kelvinator advertisements are always kept on display in the showroom. He is especially able to make use of the Kelvinator shipment figures and financial statements, which always look good to Yankee prospects. . . . RAYMOND ROSEN, highly successful distributor from Philadelphia, was along, and had with him a whopping big delegation. These Philadelphia men included: David Blatt, H. L. Brown, Charles Carson, Max Carson, Frank Christian, Meyer Cohan, John Daly, Harry Dubrow, William Fredericks, F. J. Ganister, Sam Goldberg, Reuben Grand, William Grass, W. C. Harris, David Jacobs, Eugene Kahn, Raymond Landis, Earl McCoy, Charles McCurry, C. B. Moyer, H. W. Neuffer, John Schaffer, George Schuck, E. Shapiro, William Shore, Henry Wolson, and C. E. Young.

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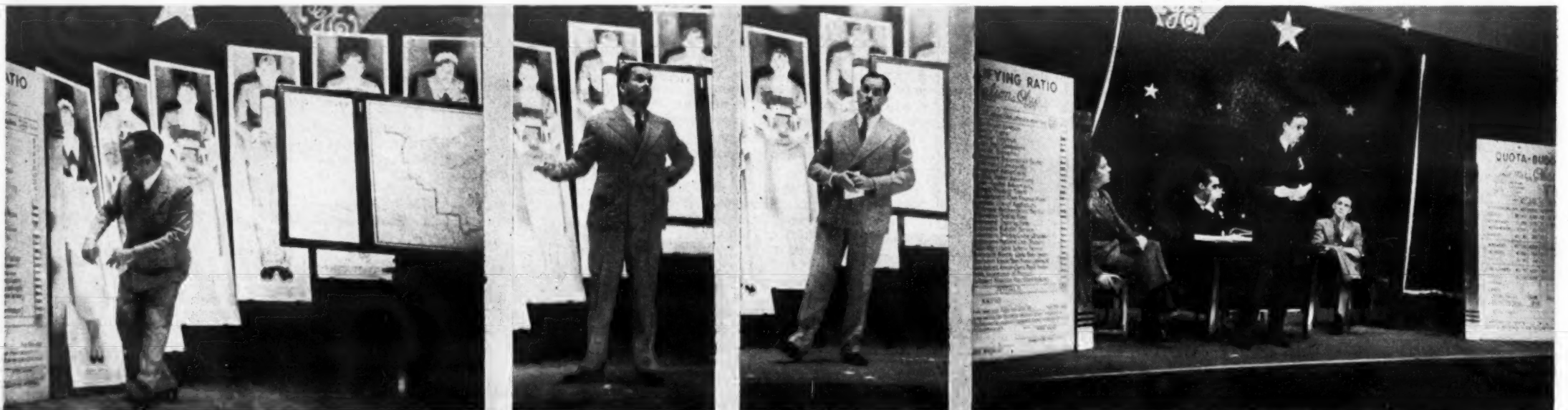
Utility Men Aboard

We have mentioned that a number of high-ranking utility executives were aboard. In this category should be mentioned A. E. WARD of the Utility Management Corp., New York City (who still has a square-toed, likeable, folksy, country-boy air about him—in spite of his important position—which makes one instantly comfortable with him). Other utility men—wait'll we draw a deep breath—

included William B. Rich of the Public Service Co. of Missouri, Warrensburg, Mo.; C. A. Stevens of the Public Service Electric & Gas Co., Newark, N. J.; George Harding, Newport, N. H.; Theodore Wilson, Shreveport, La.; R. N. Haskell and E. W. Graham, both of Bangor, Me.; W. T. Reace and Gardner Howland, both of Chicago; E. T. Moore, St. Petersburg, Fla.; Mr. Garrett, Greensboro, N. C.; Mr. Brookshire, Anderson, N. C.; W. G. Thomas, L. H. Adams, and J. A. Forney, all of Charlotte, N. C.

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As Al Uhalt Looks to an Audience of General Electric Dealers



At the dealer meeting of R. Cooper Jr., Inc., Chicago distributorship for General Electric home appliances, Al Uhalt, director of the G-E dealer division, attracted a lot of attention. Here are three poses of Al in action. Note that in the second picture he has both feet on the floor. Last picture is from one of Al's dramatic skits for dealers.

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DETROIT, MICHIGAN, OCTOBER 3, 1934

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matter Aug. 1, 1927LIBRARY
TEN CENTS PER COPY
THREE DOLLARS PER YEARCity Commission
Rejects Ban on
Outside SellingFlint Business Firms File
Protests When Bill
Passes First Vote

By Elston D. Herron

FLINT, Mich.—Electric appliance salesmen here, who a fortnight ago believed their doorbell-pushing activities were about to be halted by the city, were cheered on Sept. 24 when the commission rejected a proposed ordinance banning house-to-house selling.

The bill, which instructed police to "abate all peddlers and hawkers and itinerant street merchants as a nuisance," and provided that house-to-house men must have a specific invitation to call at a home to avoid liability to arrest, was submitted to the city commission Sept. 17 by Commissioner John J. McKeighan and got through the first reading without a dissenting vote.

During the following week, however, protests from Flint concerns using canvass selling poured into the commissioners' offices in such numbers that when the proposed measure came up for final vote at the next commission meeting, it received support from only two members, and was "tabled indefinitely."

Largest number of persons to witness a session of the commission in many months was present at the Sept. 24 meeting.

Current dope among Flint businessmen is that the measure was really intended to prevent operation of "small time" door-to-door men, such as vendors of shoe strings, vegetables, magazines, etc., and that a new bill will be introduced shortly to ban uninvited calls by all salesmen except those selling electrical appliances and automobiles.

New McCord Petrogas
System Now in Use

DETROIT—One of the first trucks in this section of the country to be equipped with McCord Radiator & Mfg. Co.'s new truck refrigeration system using Petrogas, a hydrocarbon distillate similar to Propane, is that in the service of S. Lowenstein & Son, Detroit packers.

Development of this new refrigerated truck system originated on the west coast under auspices of the Shell Union Oil Co., and as the result of an agreement some months ago between Shell and the McCord Co., the latter became the exclusive licensee for manufacture and sale of the system.

The novel feature of the system is that Petrogas is first used as a refrigerant to cool the truck body, and is then burned in the engine of the truck, according to Guy L. Tinkham, McCord engineer.

Referring to the photograph of Lowenstein's two-ton Dodge truck, it will be seen that the fuel, carried as a liquid at a pressure of 135 lbs. in the twin cylinders "A," each containing approximately 23 gallons, is led upwards to the heat exchanger "B," where the atmospheric heat of the liquid is removed.

It then passes through the expansion valve "C," from which it issues into the evaporator or cooling unit "D" as a saturated gas at a pressure of approximately 5 lbs. In its conversion from a liquid to a gas, heat absorption is effected and the truck body thereby refrigerated.

The surface of the evaporator is so proportioned that the gas leaves in a dry state and passes through the heat exchanger "B," where it absorbs the atmospheric heat of the incoming liquid fuel as above mentioned, and (Concluded on Page 7, Column 1)

Big Machinery Group
To Meet Oct. 22

WASHINGTON, D. C.—The Refrigerating Machinery Association will hold its annual meeting Oct. 22, 1934, at the Stevens hotel, Chicago, W. S. Shipment, president of York Ice Machinery Corp. and president of the association, announced last week.

At this meeting the Refrigerating Machinery Association will elect officers and plans for the coming year.

Dry-Zero Shipped
49,282 Insulation
Units in July

CHICAGO—During July, the Dry-Zero Corp. shipped pliable slab insulation for 49,282 household electric refrigerators—60 per cent of the 81,463 reported manufactured by Nema members during that month, according to Harvey Lindsay, Dry-Zero president.

This brings Dry-Zero shipments for the first seven months of 1934 to 382,873 sets of household refrigerator insulation, enough to insulate 48 per cent of the Nema output for the period—789,086 units.

During May, June, and July, Dry-Zero shipments, in proportion to Nema manufacturing units reported, gained steadily. In May, Dry-Zero shipped insulation for 86,465 cabinets or 46 per cent of the reported total. In June, shipments were 66,176 sets or 54 per cent of the total. And in July, the ratio was just over 60 per cent.

"This does not mean Dry-Zero is insulating 60 per cent of the cabinets," points out Mr. Lindsay, "because the Nema figures do not include the output of manufacturers not reporting production to Nema. However, the figures do represent the bulk of the industry."

Peltier Gets Serfel
Engineering Post

EVANSVILLE, Ind.—Frank D. Peltier, formerly in the engineering division of Serfel, Inc., has been named as assistant to Senior Vice President F. P. Nehrbaas. He will fill the position formerly held by the late C. H. Tanager.

Mr. Peltier has been with Serfel since 1925. During most of this time he has been engaged in engineering and research for the Serfel division, with the title of assistant chief engineer.

His experience in electric refrigeration dates many years previous to his Serfel connection, since he collaborated with E. T. Williams, formerly Serfel consultant engineer, in the development of an early type machine in 1916.

Announcement was also made by Vice President Nehrbaas that W. D. Collins, former chief engineer of the Serfel electric refrigerator division, has been named superintendent of all departments of the refrigerator cabinet division.

Collins came to Serfel in 1926. Since that time he has been in the engineering division.

Importance of Department Stores in Refrigeration Field Will
Continue to Grow, Says McIntyre of Kelvinator

By Elston D. Herron

DETROIT—The nation's department stores, which in a comparatively short span of time have risen to a place of major importance in refrigerator selling, will capture an increasingly large volume of the industry's business for some years to come, in the opinion of V. J. McIntyre, manager of Kelvinator Corp.'s department store division.

"Not so many years ago," is his reminder, "department stores were no factor at all in the business. But in 1933, they, with furniture stores, made 28.4 per cent of all refrigerator sales in the country. This year they will go still higher, and will continue to climb for a number of years in the future."

"The reason for that is clear. When any product reaches a certain stage of public acceptance and saturation, it adapts itself readily to over-the-counter merchandising, and the department store becomes one of the most logical and potent outlets for the product."

Not that Mr. McIntyre believes refrigeration has moved into the over-the-counter class. On the contrary, he opines that some use of specialty selling methods is highly necessary to make refrigeration a profitable item for many department stores.

In the first place, he points out, refrigerator buyers don't come flocking to the average department store in such numbers that the refrigerator department can do a profitable business just by putting some stock

Department Store
Merchandising

How some of the nation's leading department stores go about the business of selling thousands of electric refrigerators annually is told graphically and in detail in this issue of ELECTRIC REFRIGERATION NEWS.

Staff members personally visited appliance departments of prominent stores in various sections of the country, entered unannounced, and watched these departments in action. Successful department managers granted exclusive interviews on their methods of operation. Manufacturers and distributors contributed hitherto unpublished information about department stores which handle their lines.

All this information has been assembled, digested, and condensed for this issue of the News. Special articles are included on department stores in the following cities:

New York City, Newark, Philadelphia, Cleveland, Toledo, Detroit, Kansas City, Memphis, Buffalo, Grand Rapids, and Flint, Mich.

Next issue will contain articles from other cities which were crowded out of this issue by the large quantity of material available.

Service Men to Meet
In Chicago Oct. 11

CHICAGO—Complete program of the first convention of the Refrigeration Service Engineers Society, which will be held in Chicago next week, has just been announced by H. T. McDermott, secretary. Meetings will be held Thursday, Friday, and Saturday, Oct. 11, 12, and 13 at 2111 W. Jackson Blvd., headquarters for the Chicago section of the society.

Registration will start at 9 o'clock Thursday morning, followed by a call to order by Herbert Herkimer of New York, president of the society, an address of welcome by J. F. Nickerson of Chicago, a report of the secretary, Mr. McDermott, and the treasurer's report by E. J. Merenda of New York.

The first day's addresses include the following: "Benefits and the Field for Modernization of Obsolete Apartment House Equipment," by G. H. Clark of Detroit; "The Operation of an Independent Servicing Organization," by George Monjian of Chicago; "Dehydration of Refrigeration Assemblies in the Field," by F. B. Riley of Detroit; "Defining Refrigeration Servicing and Installation," by Mr. Herkimer; and "Refrigerants," a paper written by R. J. Thompson of Wilmington.

(Concluded on Page 4, Column 3)

Has New Job



EDWARD R. LEGG

Legg Gets Post at
Kelvinator Factory

DETROIT, Oct. 1. — Edward R. Legg, since 1927 a Kelvinator Corp. field representative, has been named manager of the company's national direct sales department, according to J. A. Harlan, commercial sales manager.

The department now under Mr. Legg's management directs Kelvinator sales to national buyers, and embraces the activities of the ice cream cabinet division. H. J. Priest will be assistant manager of national direct sales.

The following regional sales managers will be included among the department's 11 field representatives: E. R. Kelley, New York; H. B. Johnson, West Coast; R. J. Scheu, Chicago; A. P. Hawkins, South; A. J. Lutz, Detroit; R. N. Palm, North West; D. J. Bowen, South East; and P. B. Toohy, New England.

Mr. Legg followed his graduation from Dartmouth in 1919 with seven years in the advertising business.

Westinghouse Chest Model
Gets TVA Approval

EAST PITTSBURGH, Pa.—The new Westinghouse chest model electric refrigerator has been approved by the Tennessee Valley Authority, it was announced last week. The unit retails for \$77.50 f. o. b. factory, with the option of a five-year guarantee for \$7.00 additional.

Industry's Sales
Total for August
Is 90,200 UnitsFigure Represents Eight
Per Cent Decrease
From 1933

By A. J. Cutting

DETROIT—World sales of household electric refrigerators to distributors and dealers by industry manufacturers held up well during August, although the estimate of 90,200 units for the month represents decrease of nearly 8 per cent over the figure of 98,100 for August of 1933.

With the addition of August sales, the total for eight months reached 1,225,000 units, being 38 per cent ahead of the 884,500 estimated for the first eight months of 1933.

August sales in the United States only, totaled 77,000 household units bringing the eight-months figure to 1,145,500. Refrigerators exported during August numbered about 13,200 making exports for the eight months 79,500.

Sales by 13 members of the Refrigeration Division of the National Electrical Manufacturers Association (Nema) amounted to 79,705 units during August bringing the eight-months sales figure for that organization to 1,082,855. Nema domestic sales for August amounted to 79,705 for a cumulative total of 1,012,619, while August exports of 11,597 brought export total for Nema to 70,236.

The Nema report for August includes sales by the following member companies: Crosley, Frigidaire, General Electric, Gibson, Kelvinator, Leonard, Norge, Serfel, Stewart-Warner, Sunbeam, Uniflow, Universal Cooler, and Westinghouse. Members not reporting sales were Apex, Jomoco, Merchant & Evans, and Sparks-Withington.

The figure includes units manufactured by Nema companies for Major Appliance Corp., Montgomery Ward & Co., Potter Refrigerator Corp., Sears, Roebuck & Co., and Truscon Steel Co.

The detailed report of Nema sales for August will be found on page 14 of this issue.

NRA Ruling Prevents
Ice Plant Building

WASHINGTON, D. C.—The Industrial Appeals Board, created within NRA to hear small-business complaints, last week announced dismissal of applications for reversal of rulings given by NRA division administrators in the case of Kings County Ice & Fuel Corp. and State Ice Corp.

These firms had objected separately to the code provision requiring evidence of public need before construction of additional ice plants.

In the ice cases the board, composed of Amos J. Peaslee, chairman; Monsignor Ryan of the Catholic Welfare (Concluded on Page 16, Column 3)

Kelvinator Will Sell
For 10-Cents-a-Day

DETROIT—A 10-cents-a-day payment plan is now being offered to major retail stores employing Kelvinator Corp.'s plan of meter selling as a spur to fall sales, V. J. McIntyre, manager of the company's department store division, declared last week.

The offer applies only to the fall and winter months, the customer's daily payments being arranged to increase in the spring of 1935.

Annual Nema Conclave
Will Open Oct. 16

NEW YORK CITY—The 1934 Annual Meeting of the National Electrical Manufacturers Association will be held Oct. 16-20 inclusive at the Palmer House, Chicago.

The Refrigeration Division sectional meeting will start at 2:30 p. m. Thursday, Oct. 18.

It is expected that the meeting will see the spotlight turned on the basic NRA code for the electrical manufacturing industry and on the supplemental codes for the various divisions.

DEPARTMENT STORES

Promotion Formula Keeps Sales Moving for Toledo's Lion Store

Manager Explains Why Frigidaire Line only Is Handled; Salesmen Work in Air Conditioned 'Shop Within a Shop'

By Elston D. Herron

TOLEDO—Keep shouting. Don't let the public forget that you have something good to sell. Back that up with expert salesmanship, and there will be no wincing when the sales reports come out.

Although it has dozens of ramifications, that formula is the bedrock upon which the 78-year-old Lion department store in Toledo bases all its activities in the sale of household appliances. And L. S. Talbert, merchandising manager, makes it one of his jobs to see that that formula is kept in operation.

Consistency Is Theme

"When I say consistent promotion, I don't mean a big spurge of it at special times in the month or year," he says. "I mean daily and weekly promotion—a constant flow of it through a half-dozen channels that will make people first think of appliances and then bring them to the Lion Store. The department store whose promotion is spasmodic will find its appliance sales slipping."

Advertising alone, no matter how much of it is used, won't do a 100 per cent job as "constant reminder" to the public, thinks Mr. Talbert. Promotion starts at home. So the appliance department is located on the street level—a store within itself, sandwiched between other merchandise divisions in such a way that a goodly percentage of the day's traffic goes through the well arranged appliance displays.

Spot Exhibits in Main Store

At strategic points throughout the big store are spot exhibits, value of which Mr. Talbert does not question, although he says it is impossible to check accurately on their effectiveness in turning the casual shopper's mind to appliances. The department makes constant use of the two windows fronting it, and usually has at least one window display in another part of the store.

The Lion Store handles only one make of electric refrigeration—Frigidaire. Other of its products are Easy, Thor, and Apex washers and ironers; Sparton, Philco, Victor, and Grunow radios; and Magic Chef and Detroit Jewell gas ranges.

Why One Line?

Why just one refrigerator line? "To us it seems like good merchandising. When we handle a single make of refrigerator, it shows the public that we are thoroughly sold on one product. We can make a Frigidaire-Lion reputation tie-up that means something in Toledo, gives strength to all our refrigeration promotion."

Then why more than one make of your other appliances?

Because, except in refrigeration, we can't find any one make with enough outstanding characteristics to warrant putting our complete effort behind it. By handling several makes—of radios, for instance—we have about all the good features in the radio field."

The store maintains a staff of 10 men for refrigeration selling, eight on washers and ironers, eight on gas ranges, and four on radios. Radio is the only one of Lion's major appliances on which no outside selling is done.

"We have no inter-selling," says Mr. Talbert. "That is, a refrigerator salesman is not permitted to sell a washer, but there is regular exchange of prospects. Each appliance crew has its own supervisor who concerns himself almost entirely with the sale of one appliance line."

Experienced Men Only

"We hire only experienced salesmen. We are here to sell appliances, not run a school for training beginners. That doesn't pay. Size of each selling staff is predetermined, and strictly adhered to. When we have a specified number of men selling refrigerators, we don't hire another man until there's a vacancy, no matter how good the man is."

"Such a practice works surprisingly well at minimizing turnover. During all of 1933, we lost only two men, and only three have left us since the start of this year. All our salesmen are paid on a sliding-scale commission basis, with no drawing accounts. Too many men would never produce if we made drawing accounts available to them. And we have found that basing

the commission on the size of the model encourages the man to 'sell up' whenever possible."

Although electric refrigerators are displayed in several places around the appliance shop, Frigidaire demonstrations and sales presentations are made in a "shop within the shop," specially built for the purpose and air conditioned by a \$1,500 Frigidaire system.

Open Till 9 p. m.

The appliance department remains open in the evening until 9 o'clock. Each man on every sales staff is assigned a certain time and number of hours for floor work each week. Remainder of the working time in that week he is required to spend in outside selling (radio men excepted).

All salesmen turn in complete reports on their activities at the end of each day. The report shows the total number of contacts made, number of users visited, number of prospects seen, number of new prospects received, number of night husband-and-wife calls made, and the number of sales.

Importance of Reports

The merchandise manager places much importance on these salesman reports. "They give us a pretty good means of checking on why a man is or is not getting the results he should. All items shown are compared with the results he is getting, and if the latter are puny, we can generally determine from the report what part of his work is causing the trouble."

Morning meetings of salesmen are held almost daily, but except for constant hammering on the point that the men must keep locating new prospects if they are to make a go of their jobs, the supervisors stay somewhat away from conventional morning-meeting sales instruction. Rather, they spend time informing the salesmen on store affairs and policies, business trends, etc.—actually selling the men on the idea that the Lion Store is a good concern and is the logical place for Mrs. Toledo to buy her household conveniences.

The 'Keep Shouting' Idea

This practice is merely another part of the store's policy to "keep shouting," even to its own employees, and is in line with Mr. Talbert's belief that "promotion starts at home."

Incidentally, when the salesmen leave the store to sell, they aren't permitted to canvass promiscuously—from the city directory their supervisor assigns each of them the names of all persons on one street. When his street has been canvassed thoroughly, the salesman gets another street to work on.

The Lion Store is a strong believer in advertising and plenty of it, but not on all types of it. Said Mr. Talbert:

No Institutional Copy

"We make all of our advertising promotional—none of the institutional type for us. It shouldn't be necessary for a concern as old as ours to advertise that we are a good store, or that we have some lovely things to sell. We think it is better to let our merchandise prove that we are good, so we use advertising to give people reasons why they should buy the merchandise."

Largest volume of the company's appliance advertising is newspaper display, but some use is made of radio, and direct mail plays an important part in the department's advertising program.

"Practically all of our direct-mail pieces are postcards. They cost less, and they produce best results. Their message is short; almost everybody will take the time to read it. In much of our advertising, we play up price, and whenever possible we use the 'comparative price' theme—giving present price as compared with what it was sometime ago. This can be done to good advantage when we buy clearance lots of appliances from manufacturers, or when factory prices are lowered."

The store's refrigeration sales so far this year are 34 per cent ahead of the same period last year, although August was a tough month. "August of 1933 was a natural for refrigerator sales," says Mr. Talbert. Prices were skyrocketing, people were rushing in to buy. This August there was nothing like that to pull the prospects in."

Daily & Scaife Talk At Regional Meetings

CLEVELAND—Increased sales and advertising activities, salesmen's compensation, and controlled retail selling are being discussed at a series of two-day regional conferences of representatives of General Electric refrigerator distributorships, which opened at Nela Park, Cleveland, Sept. 10 and 11.

Principal speakers at the Cleveland meeting, who also are in charge of subsequent regional conferences, were Walter J. Daily, sales promotion manager of the specialty appliance sales department of General Electric Co., and A. L. Scaife, retail sales manager. Daily outlined plans for further coordination of retail sales efforts with advertising and sales promotion while Scaife led the discussions on compensation for salesmen and retail selling.

Schedule of regional conferences, attended by sales promotion managers and retail sales managers of distributorships, follows:

Cleveland, Sept. 10-11—Electrical Housekeeping, Inc., Cleveland; Bard & Barger, Inc., Columbus and Cincinnati; H. G. Bogart Co., Toledo; Caswell, Inc., Detroit; Electric Home Appliance Co., Charleston, W. Va.; Frank W. Wolf, Inc., Buffalo; Ochiltrie Electric Co., Pittsburgh; Hoosier Electric Refrigerator Co., Indianapolis; Gould-Farmer Co., Syracuse; W. N. Hogan, Inc., Wheeling, W. Va.

Boston, Sept. 13-14—W. L. Thompson, Inc., Boston; G-E Supply Corp., Boston; Rex Cole, Inc., New York; P. H. Harrison & Co., Newark, N. J.; A. Wayne Merriam, Inc., Schenectady; Modern Home Utilities, Inc., Waterbury, Conn.; E. Pulver Cook, Inc., Providence, R. I.; Breckenridge, Inc., Springfield, Mass.

Washington, D. C., Sept. 17-18—National Electrical Supply Co., Washington; Keystone Appliances, Inc., Harrisburg, Pa.; Clark Adams, Inc., Atlantic City; Judson C. Burns, Inc., Philadelphia; R. S. Montgomery, Inc., Richmond, Va.; The Hines Co., Baltimore.

Atlanta, Sept. 21-22—W. D. Alexander Co., Atlanta; Perry-Browne, Inc., Columbia, S. C.; L. W. Driscoll, Inc., Charlotte, N. C.; Geo. Patterson, Inc., St. Petersburg, Fla.; Matthews Electric Supply Co., Birmingham.

Dallas, Sept. 24-25—Electric Household Appliances, Dallas; O'Bannon Bros., Little Rock; Southern Appliances, Inc., New Orleans; Edmundson Refrigerating Co., Houston; Albert Ahrens Co., Oklahoma City.

St. Louis, Sept. 26-28—James & Co., St. Louis; Midwest Electric Appliances, Inc., Omaha; Kansas City; R. Cooper Jr., Inc., Chicago; Tennessee Appliances, Inc., Nashville; E. H. Schaefer Corp., Milwaukee; O. F. Stuefer Co., Minneapolis; Crescent Electric Supply Co., Davenport, Iowa; Dakota Electric Supply Co., Fargo, N. D.; Thompson-Sterling, Inc., Louisville; G-E Supply Corp., Des Moines; G-E Supply Corp., St. Paul.

Denver, Oct. 1-2—B. K. Sweeney, Inc., Denver; G-E Supply Corp., Butte, Mont.; G-E Supply Corp., Salt Lake City; E. O. Cone Co., El Paso.

San Francisco, Oct. 5-6—Electric Appliances, Inc., San Francisco; George Belsey Co., Los Angeles; Geo. T. Bauder Co., San Diego; G-E Supply Corp., Portland, Ore.; Valley Electrical Supply Co., Fresno, Calif.

G-E Coach Operator Gives Sales Ticket to Policeman

LAGUNA BEACH, Calif. — The mayor of Laguna Beach sent a police officer to collect a merchandising license fee for the operation of a G-E kitchen coach in the town. The coach was operated by Forrest Heatt for the George Belsey Co., Los Angeles distributor.

The police officer forgot to collect the license fee, buying an X-5 refrigerator instead.

The mayor then sent the chief of police to collect the fee. Another selling talk by Heatt made the chief forget his mission and he is now considered a "hot" prospect.

Invisible Kitchen Co. Names 5 Distributors

CHICAGO — Electric Invisible Kitchen Co. has announced five new distributor connections for the sale of its complete line as follows:

The Heimann Co., 1233 Laurel Ave., St. Paul, Minn.; Huey & Philip Hardware Co., Hotel Equipment Dept., Dallas, Texas; R. R. Dwyer, 4428 Avacado Ave., Los Angeles, Calif.; W. J. Vesey, 1100 N. W. 21st St., Oklahoma City, Okla.; Michigan Appliance Sales Co., 412 Dryden Bldg., Flint, Mich. (which will soon open an office in Detroit).

Arrangements have also been completed with the A. J. Alsford Corp., 223 W. Jackson Blvd., Chicago, to handle export trade.

Salesmen in the Making



MANSFIELD—Latest sales promotion program of the refrigeration department of the Westinghouse Electric & Mfg. Co. is a treasure hunt for boys and girls. The activity has been labelled "Captain Strong's Westinghouse Treasure Hunt."

The treasure hunt is part of the national campaign to sell prospects who have remained unsold throughout the intensive selling season this past summer. The contestants are known as "Junior Salesmen."

Each treasure hunter secures a clue book from the local Westinghouse dealer. He can enter as many as 10 clues which are the names and addresses of families which have not yet purchased an electric refrigerator.

If one of these prospects buys a Westinghouse refrigerator before Christmas, a prize is awarded. Prizes depend on the number of "clues" who make the purchase before Christmas. Included among the awards are bicycles, skates, and football outfits.

General Electric Resale Operation Brings Higher Unit Sale for May Co. in Cleveland

CLEVELAND—Since the May Co., large department store here, began use of a General Electric resale operation in its appliance division more than two years ago, sales of G-E products through that outlet have shown a consistent increase, according to Ralph C. Cameron, department store manager of General Electric Co.'s specialty appliance sales department.

Located on the fifth floor, May's appliance section is actually two departments in one—one featuring major appliances, the other made up of household conveniences of the smaller variety. The G-E resale operation, established by Electrical Housekeeping, Inc., Cleveland General Electric distributor, has conspicuous space in this department.

Major Appliances Only

While the May appliance section, which is managed by Nelson P. Wright, handles many makes of appliances and virtually all household conveniences made by G-E, only major appliances by this manufacturer are carried on a resale basis, says Mr. Cameron.

In this cooperative setup between the department store and Cleveland distributor, the latter consigns merchandise to the store; delivers, installs, and services G-E appliances sold by the May Co.; employs, trains, supervises, and compensates the G-E sales force; pays the cost of all G-E advertising up to an amount mutually agreed upon, with additional advertising subject to special consideration.

How Plan Operates

In turn, the May Co. agrees to supply adequate display space for G-E appliances on the sales floor, supplemented by spot displays in the store's heavy traffic lanes and windows; approve credit of purchasers, carry the accounts, and make all collections. The store's remuneration consists of a percentage on all business cleared through the resale department.

The G-E distributor maintains a staff of five full-time salesmen, including a supervisor, in May's General Electric section, while the department store has six full-time salesmen to sell all appliances. The G-E men are paid on a commission basis with a drawing account, and are selected for this work largely on the basis of their sale-closing ability.

Salesmen Get Break

If one of the store's own salesmen sells a General Electric appliance, the distributor pays the commission; likewise, if one of the G-E salesmen sells an appliance of competitive make, as sometimes happens, he is paid a commission by the store, according to Mr. Cameron.

Both the G-E and the store's own men are obliged to make afternoon and evening follow-up calls on good prospects.

Higher Unit Sale

"Big advantage of a resale operation to a department store," says Mr. Cameron, "is that it insures in many instances a higher unit sale due to better-trained salesmen, and it eliminates delivery, installation, and servicing, with their attending costs. Advantage of such an operation to the distributor is that it creates considerable 'plus' business, estimated to be

as much as 90 per cent in some instances.

"The department store resale operation, instead of taking business away from the small dealer, really helps him, since the smart merchandising tactics practiced by department stores tend to make people more electrical appliance conscious—with the result that sales climb to the benefit of all retail outlets."

How Plan Keeps Dealers

Besides the May Co., three other Cleveland department stores have General Electric appliance departments. They are the Higbee Co., William Taylor Son & Co., and Fries & Schuele Co. Higbee's department is a resale operation, while the other two are franchised as regular G-E dealers.

Buffalo Store Finds Meter Plan Profits Are Maintained

BUFFALO—The belief still prevalent among some major retail outlets that the second year of selling refrigerators on a meter payment plan is likely to be less profitable than the first is refuted by the selling record of Schwegler Bros., local Kelvinator outlet.

A long-established piano firm, Schweglers, under the direction of President A. F. Schwegler, has steadily increased its Meter-Ator sales since adopting meter selling in 1932.

The company supplements the work of the sales force with consistent advertising campaigns, including regular use of newspapers and radio. As sponsor of daily baseball broadcasts during the Buffalo playing season, the firm is reputed to be the only refrigeration outlet putting baseball games on the air.

Another Schwegler radio program, the five-nights-a-week "Ironie Reporter"—an ironic digest of the day's news events—has built up a large following of listeners.

St. Louis Utility Installs Kitchen in Headquarters

ST. LOUIS—An all-electric kitchen and small auditorium for the purpose of demonstration and promotion were installed at the Union Electric building, 12th and Locust Sts., here, by the Electric Cookery Council, an organization composed of electrical dealers and distributors in St. Louis. The kitchen was displayed to the group by C. E. Michel, sales manager of the Union Electric Light & Power Co. The home economics director for Union Electric demonstrated the operation of electric ranges and the points of strongest interest in selling electric cookery to women.

The kitchen is equipped with a deluxe electric refrigerator, a dishwasher with double drain space, two electric ranges, an electric mixer, and necessary small electric appliances.

Behind the kitchen is a food preparation center equipped with sink, cabinets, and working surfaces. In front of the small stage of the kitchen is the auditorium. The whole set-up is air conditioned.

"WHAT IS SAUCE FOR THE GOOSE IS SAUCE FOR THE GANDER."



...or should be!



In all the MILLIONS of electric refrigerators manufactured during the past few years practically ALL have porcelain enamel interiors.

... Because nothing else will stand up

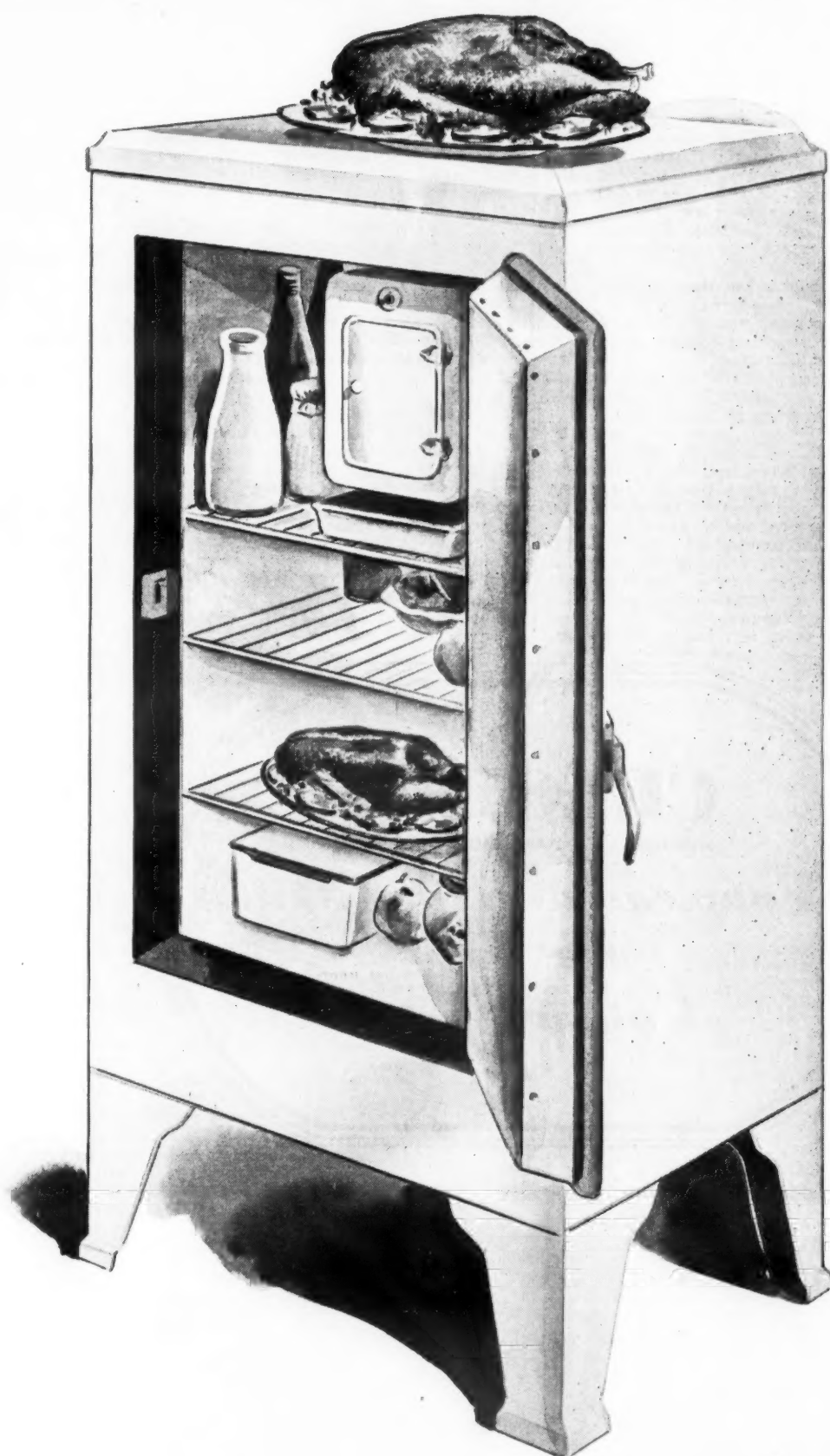
In selling electric refrigerators you emphasize the porcelain enamel interior . . . Because it helps sell the unit. People *know* the durability, the lasting quality, of porcelain enamel. They have been sold on it through their bath-room equipment, ranges, washing machines, table-tops, etc. . . . Just the mere mention of the fact that the interior of the box is porcelain enamel is enough to convince the buyer of its enduring whiteness.

Porcelain enamel will do an even better selling job for you if it is on the outside . . . Because all the eye-appeal, the beauty, the pride of ownership, is on the outside.

Most buyers don't know nor care about "organic" or "inorganic" finishes. All they know is that they have seen some refrigerators that look as if they had a bad case of "eczema". And they know they weren't porcelain enamel.

EDUCATIONAL BUREAU
CLEARING HOUSE FOR SALES AND TECHNICAL INFORMATION
PORCELAIN ENAMEL INSTITUTE, INC.
612 NORTH MICHIGAN AVENUE • CHICAGO

PORCELAIN ENAMEL *THE Lifetime Finish*



Assure your customers that "here is a refrigerator that is porcelain enamel—inside and out"—and you have instantly dispelled all lingering doubts about finish wear, or "ice-box eczema".

Make porcelain enamel work for you—both ways:

- 1. In making satisfied customers—**
- 2. In making longer profits.**

Write for Book

Give your salesmen the selling value of facts. Get a copy of the book "What You Should Know About Porcelain Enamel" and have them read it. It will help them to bigger profits—happier customers.



Porcelain Enamel Institute, Inc.
612 North Michigan Ave.
Chicago.

Send me a free copy of your 24-page book "What You Should Know About Porcelain Enamel." No obligation, of course.

Name

Address

Town and State.....

DEPARTMENT STORES

Gimbel's N. Y. Store Changes to Known Makes Only; Sales Climb

Advertising Planned to Cash in on Consumer Recognition of Known Brand Names

NEW YORK CITY—Gimbel Prothers department store here within the last year and a half has changed its type of refrigeration merchandise from a combination of one known brand and a number of unknown brands to six leading makes and no unknown brands with the result that its refrigeration sales have shown steady increase, according to figures compiled by the management.

Principal reasons for the increase in sales, according to the management, were that the salesmen met with selling resistance and the customers liked the idea of seeing the different makes of refrigerators on the floor.

While some of the Gimbel merchandise executives believe that there are good reasons for a department store getting behind one or two leading makes and becoming known as the headquarters for these makes, they do not think this plan would apply in a huge metropolitan area.

The executives point out that the shopping area is so tremendous, the customers have so many different kinds of prejudices, that the store can realize a pretty good volume on all of the various makes handled.

Chief argument of the Gimbel management for having the different lines, however, is that this procedure will help to establish the store as a "shopping headquarters" for housewives—that it will enable the house-

wife to buy any size or type of refrigerator she might desire.

Gimbel's advertising on refrigeration, since the setup on refrigeration was changed, has been designed to cash in on consumer recognition on the leading brand names.

One of the first of its advertising series was what was termed the "What's In a Name?" series. Under this heading the copy would take a name like "Frigidaire" or "Norge" and explain why refrigerators with these names were being carried by Gimbel's.

To induce store traffic to flow through its refrigeration department Gimbel's resorts to cooking schools. As a special inducement to shoppers during the period of the cooking school, Gimbel's often offers "specials" in form of discontinued models in lots of considerable size.

One advertising innovation that Gimbel's employs is to take illustrations of the six makes which the store handles, show them in an advertisement, and captioning them with "See all six before you buy," in the manner of Mr. Walter Chrysler's widely known advertising campaigns.

To give this advertising campaign additional punch, Gimbel's offered its customers a free trial of 30 days on any refrigerator. Customers purchasing on this plan paid a down payment and had their credit carefully checked, but they had the store's

promise of the return of the down payment at the end of the 30 days if they didn't decide to keep the refrigerator.

Merchandise is displayed by grouping them according to makes on the floor. The management believes that a more logical way would be to group them by sizes, but it has been found that there is so much prejudice on the part of customers towards certain manufacturers that the better policy is to display the refrigerator by makes.

Gimbel's does not maintain any outside selling organization, although the management is constantly experimenting with this type of selling. Principal reasons for not employing an outside sales force, as listed by the management, are the size of the territory, a salesman would have to cover, the difficulty of getting into New Yorker's homes, and the rapid turnover of the canvassing type of salesman.

Gimbel's instructs its customers to send all service complaints to the store, so that the appliance department can control the service on the refrigerator. In some cases the store's own service department handles the complaint, in other cases it is turned over to the manufacturer's representative.

Service Men to Meet In Chicago Thursday

(Concluded from Page 1, Column 3)

ington which will probably be presented by some other engineer.

The second day's meeting will open with the "Question Box," followed by "Remedying Oil-Bound Evaporators and Overcoming Excessive Dirt in Refrigerating Systems," by T. J. Fowler of Chicago; "Thermostatic Expansion Valves," by D. D. Wile of Detroit; "A Discussion and Data on Pressure Drop of Refrigerants Through Tubing," by C. E. Hamilton of Chicago.

"Commercial Low Sides," by Joe Askin of Buffalo; "Lubrication of Mechanical Refrigerators," by Dr. Erich Meyer of New York; "Ice Cream Cabinet Servicing," by Paul Jacobsen of Chicago; and "Controls," a paper to be presented by a representative of the Minneapolis-Honeywell Regulator Co.

The last day's session will open with the "Question Box," followed by a report of the society's national educational and examining board. Papers to be presented are "Determining the Rate of Service Charges," by Harry Busby of Chicago; "Accounting Systems for Service Organizations," by J. B. Cook of Chicago; "Estimating Repairs and Installations," by J. H. Downs of Detroit; and "Evaporators and Fin Coils," by A. F. Haesel of Chicago.

Two subjects for which speakers have not yet been decided are "Air Conditioning" and "Refrigerating Equipment Tests." The last session will also include open discussion on "What Should Be Done to Fill in the Off-Peak Season" and "Qualifications of an Efficient Service Man."

The convention will adjourn Saturday afternoon after reports of various committees and election of officers.

Cooking School Sessions Are Broadcast by Brandeis Store

OMAHA—Cooking school sessions conducted in the G-E all-electric kitchen, recently installed in the house furnishing department of the Brandeis Department Store here, are broadcast by radio.

The Brandeis store practical kitchen is in daily operation during cooking school sessions, in full view of the audience. Salespeople explain the services of the appliances before and after each program, which is interspersed with entertainment.

The programs, broadcast over the radio, cover the immediate trade territory of Omaha and distant points of Nebraska and Iowa, almost equaling the entire territory served by Electric Housekeeping, Inc., G-E distributor for Omaha.

Officials have noted an increase in the sale of small appliances and accessories, due, it is thought, to the increased traffic in the department.

Westinghouse Equips Line of Freighters

GALVESTON, Tex.—The six Lykes Line freighters plying between here and the West Indies are now equipped with Westinghouse refrigerators and water coolers.

Refrigerators installed on the Lykes ships are Westinghouse models AP-60 and BP-65 with converters. Water coolers are Westinghouse model WT-501, finished in lacquer.

As each ship returns to port, Service Man Arthur Lush, who installed the Westinghouse equipment, inspects the installation.

Success of Kresge Store Due to Specialty Selling Methods

Bacharach Exponent of Theory of Customer Comfort & Outside Canvassing

NEWARK, N. J.—"We believe in specialized selling," declares Emile M. Bacharach, manager of the appliance department of the Kresge department store here. This belief put into practice has made Kresge's an outstanding merchandiser of electrical equipment in this territory and has added to Mr. Bacharach's reputation as a "master" in the art of specialty selling.

Mr. Bacharach has had a long and varied career in the specialty selling business. He has sold advertising signs, safety razors and paper towels. For nine years he was a successful automobile dealer. His introduction to department store merchandising was through the establishment of a tire department for a department store.

Dual Background Needed

"I honestly believe from my experience and observation that neither a department store background nor a specialty selling background alone is sufficient to procure maximum results in the management of an appliance department in a department store," says Mr. Bacharach.

"Department store training presents a background that is too much bound by tradition, lack of vision and pettiness. The man trained only in specialty selling is apt to become confused by the detail, routine, red tape and policies which are a necessary part of such diversified operations as are carried on in department stores."

Five distinct electrical appliance departments operate in the Kresge store under the direction of Mr. Bacharach—refrigeration, washing machines, vacuum cleaners, Hoover vacuum cleaners, and Norge oil burners.

Distinct Organizations

Each of these departments has its own sales organization headed by a supervisor, each sells only its own specialty, although the operations are so conducted that a clearing house for "leads" is set up whereby a salesman in one division can share in the commission on a sale made on one of his leads in another division.

"In our refrigeration department," says Mr. Bacharach, "we sell Norge, Frigidaire, Westinghouse, and General Electric models. We do not have special sales or 'closeouts' on other makes. We sell Frigidaire on the Meter-Ice plan and have Meter-Ice exclusively in Newark."

"The refrigeration department is located on the seventh floor adjacent to the credit offices. A feature of our display space is that we have provided plenty of tables and chairs for the use of our customers. Customers have to sit down to sign contracts, and we like to make it easy for them."

"Employed in the department at the present time are 15 salesmen and a supervisor. Part of their time is spent

on the floor contacting prospects out of the store traffic, but most of their time is spent on the outside, following up names taken from the charge account files, and contacting users for names of additional prospects.

"Heavy emphasis is placed on the store's background in training these men and they are taught to treat contacts as friends of the store. High pressure methods are discouraged."

What Customers Remember

"Salesmen are taught that the first thing a customer forgets is the price paid for merchandise, the next the name of the manufacturer (how many people can tell you the make tires there are on their car), but a customer never forgets where the merchandise came from."

While the salesmen are trained in the store tradition, the fact that they are to be "specialty salesmen" instead of "retail sales persons" and that electric refrigerators are sold and not bought is not overlooked. Mr. Bacharach points out the difference between "specialty" and ordinary selling as follows:

"A specialty sales person is one who is able to create in others such a strong desire for ownership in anything not regularly purchased that a sale results. A regular retail sales person is one who sells a familiar article regularly purchased to a customer ready to buy. Electric refrigeration requires the creative selling of an idea, the dramatization of an unknown need, the painting of a mental picture in the mind of a prospect, and very often this must be done in the home of the prospect for a family decision."

The refrigeration department maintains prospect files, and salesmen are protected on their leads for periods of time which vary according to the season of the year. These files are kept up to date and every effort is made to see that a salesman follows up his prospects promptly and properly. Salesmen are paid on a straight commission basis.

Attempts are made to individualize the refrigeration department advertising, which is included with other Kresge copy in most instances. Window displays are coordinated with special "stunts" or campaigns being carried out by the manufacturers whose lines Kresge handles. For example, when General Electric ran double page spreads in the *Saturday Evening Post*, these advertisements were "blown up" and used as a background for the window displays.

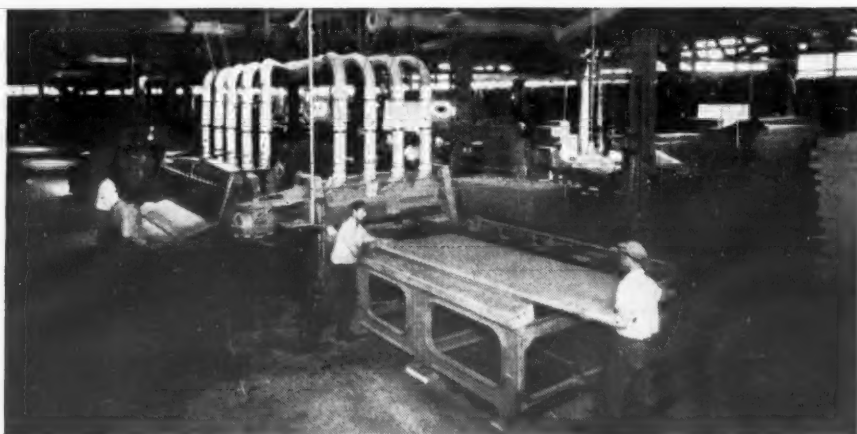
Cooking schools form part of the refrigeration department's promotional program. Recently Mrs. Ruth Graham, Norge home economist, staged a cooking school for the Kresge store, which went to some lengths to provide the proper setting for the school, and proper publicity.

CELOTEX

(STERILIZED • WATERPROOFED • ODORLESS)

Fabricated at the Mill
for any
Cabinet Type

Wins Approval of Manufacturers as Superior Refrigerator Insulation



Showing a section of the Fabrication Department, Celotex Mills, Marrero, La., where a large Meeren Johnson trips and cross cuts Celotex boards to sizes for further fabrication.

Celotex offers many special advantages as a refrigerator insulation that appeals strongly to cabinet builders.

Celotex is a structural board as well as an insulating product and is furnished ready fabricated. The fabrication of the material is done at the Celotex mills where special equipment is available, for cabinets of every type, size, or form.

The boards are fabricated to the exact length, width and thickness to cover each insulated area, so that heat-leaking cracks or joints are reduced to the minimum.

The workable nature of Celotex—the ease with which it is machined for the cutting

of holes, for beveling, or for notching—its inherent strength which assures a sturdy cabinet built of a material light in weight—all these are advantages that win the approval of manufacturers.

Celotex, made of long, tough cane fibres, is an effective insulation, because it is highly resistant to the passage of heat. It has a further valuable characteristic, as it absorbs sound and is used successfully to quiet motor compartments.

Celotex, furthermore, is sanitary and odorless. Every fibre is sterilized and waterproofed. Consult our refrigeration specialists. They are thoroughly experienced. Write—

THE CELOTEX COMPANY, 919 NO. MICHIGAN AVE., CHICAGO, ILL.

Protection Against Attack By Destructive Pests—All Celotex Cane Fibre Products are manufactured under the Ferox Process (patented) and therefore effectively resist damage by Fungus Growth, Dry Rot and Termites (White Ants).

CELOTEX

INSULATING CANE BOARD

(Reg. U. S. Pat. Off.)



BUILDS • INSULATES • DECORATES



"All the world's a stage"—
Shakespeare

The Stage is Ready

for the performance, during 1934-1935 of

"Refrigeration Sales"

playing to
an audience of several million prospects.

CAST: Manufacturers, Distributors and Users of
Household and Commercial Refrigeration

Have You a Part?

The curtain will rise soon on the year-round performance of "Refrigeration Sales". The stage is ready, the audience awaits the curtain call, players must know their parts and be intensively rehearsed in their lines before attempting a performance. Are you a principal or just an "extra" in the play about to begin.

Do you have a leading part in this dramatic entertainment or are you just a spear-carrier in the mob scenes?

Copeland expects to play the "heavy lead" in 1934-1935 refrigeration. It is ready to give a superb performance as a manufacturer of complete refrigeration units, both domestic and commercial. It has assembled, in its support, a group of aggressive distributors, but invites others to join the cast.

Properties used are a complete household line, economical, dependable, convenient and attractive; a range of 21 distinct models of Commercial Condensing Units from 1/8 to 3 H.P. and, as an added attraction, three new condensing units of 5, 7½ and 10 H.P. for air-conditioning applications.

Copeland products are made in one of the most complete manufacturing plants in the industry, utilizing every conceivable method known to science for the design, development, production and test of superb refrigerating equipment.

TO DISTRIBUTORS

Copeland offers attractive leading parts in the coming presentation of "Refrigeration Sales" to competent, aggressive distributors and is prepared to write contracts on a basis decidedly satisfactory to qualified performers.

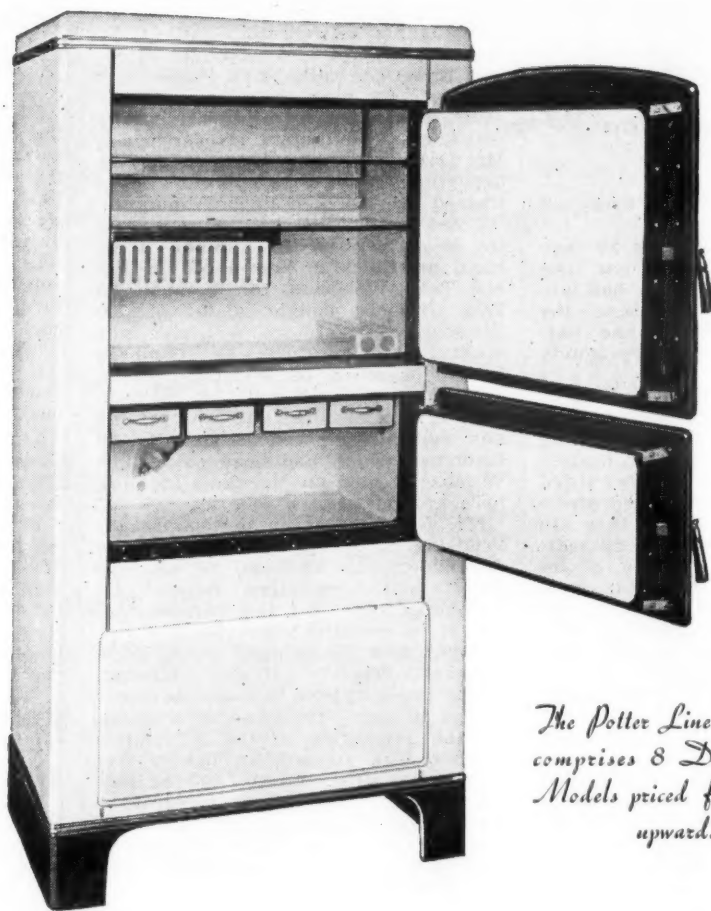
COPELAND REFRIGERATION CORP., Mount Clemens, Mich.
Division of Winslow-Baker-Meyering Corp.

Copeland
DEPENDABLE ELECTRIC REFRIGERATION

POTTER

1935 Models

NOW AVAILABLE



*The Potter Line for 1935
comprises 8 Distinctive
Models priced from \$129
upward.*

During 1934 . . .

POTTER Dealers have ALMOST DOUBLED the refrigeration industry's national average of dollars per sale per dealer.

POTTER Dealers have MORE THAN DOUBLED the refrigeration industry's national average of refrigerator sales per dealer.

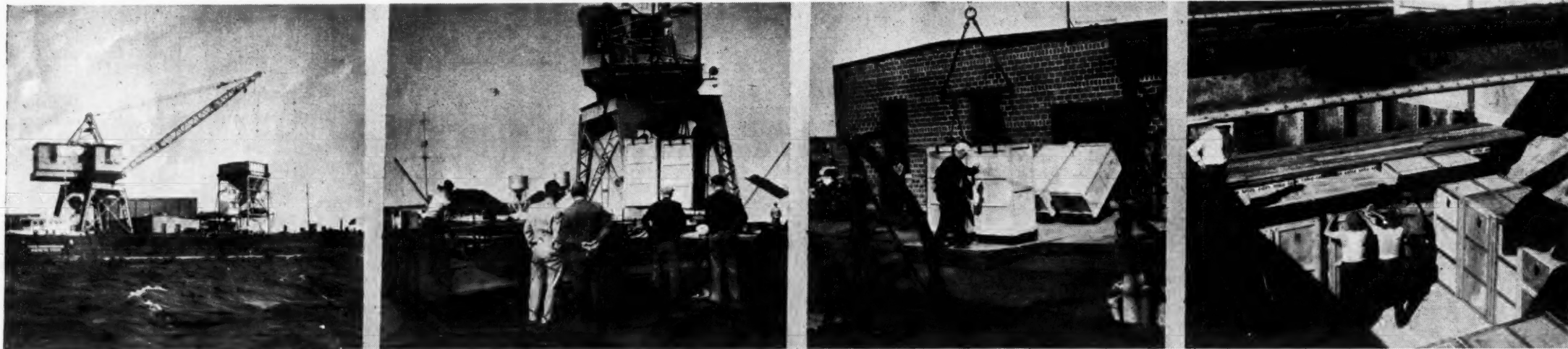
POTTER Dealers have almost QUADRUPLED the industry's national average of DOLLAR VOLUME per dealer.

POTTER Dealers have established, more conclusively than ever, the superiority of AIR-CONDITIONED Refrigeration.

POTTER Dealers have proved that the POTTER FRANCHISE with its plan of ONE DEALER TO A CITY and a wider profit margin is A MONEY MAKER.

POTTER REFRIGERATOR CORPORATION
BUFFALO NEW YORK

Steamer 'Buckeye State' First Boat to Dock in New York City with Cargo of Refrigerators



Glen O'Harra, eastern manager for Norge Corp., was a proud man when the motorship "Buckeye State" docked in New York a fortnight ago with 675 Norge refrigerators for export and 125 for the New York warehouse. Although many ships have left New York with electric refrigerators, this was the first ship to bring them into New York direct from the factory. The boat was loaded at Muskegon, Mich., and reached New York by way of Buffalo and the Erie Canal. With a net tonnage of 1,850 tons and a draft of 9 ft., some difficulty was encountered in clearing the canal locks, according to members of the crew. Above pictures show some of the unloading operations.

DEPARTMENT STORES

Displays, Smart Salesmen Make Gimbel a Leader in Philadelphia

Own Service Department Precludes Grief on 'Orphans'; Nearly 50% of Sales Are Made on Meter Plan

By George F. Taubeneck

PHILADELPHIA—After calling on four distributors in the City of Brotherly Love, there wasn't any question about it.

"What department store," we had asked each of these distributors, "does the best job for you on refrigerators?"

"Gimbel Bros.," three of them answered unhesitatingly.

The fourth wasn't sure, but he called an assistant and soon found out. It was Gimbel Bros.

So to Gimbel Bros. we went. It is not a particularly distinguished department store from the viewpoint of appearance, but the moment you step inside you sense that it is a beehive. It's not a take-it-or-leave-it place, or even a come-and-get-it store. It is more. The merchandise jumps out and grabs you.

Immediately after shoving through the revolving door we plumped smack into an aisle booth with a very-inviting-indeed display of coconut confections. Booths just like this one (but with different kinds of food displays)—all parts of a store-wide "Pure Foods Fair"—were to be found every place you turned, whether it was hats, misses and young women's (sizes 14 to 28) dresses, leather goods, silk purses, sow's ears, or sporting goods.

It's that kind of store. Some special promotion, of an advanced order and exceedingly well done, is constantly in progress.

First redheaded salesgirl we saw—she was in cosmetics—was able to tell us where the refrigeration department was—and that's unusual, in a department store.

And so, after the usual rigamarole of heavy aisle traffic, elevators packed like New York subway trains on a Saturday afternoon, and making left turns through the chinaware and cut glass departments, there we were in the midst of more refrigerators than some manufacturers sell in a year.

Male Home Economist

In the center of this mammoth subdivision of floor space a cooking school was in progress, with some 100 women listening raptly to a handsome and entertaining male lecturer.

At first there was nothing but ice-boxes in sight. All kinds and styles and prices, including some substantial boxes made by Sanitary, and a fancy ice refrigerator with an electric fan in the top to circulate air around the ice and over the foods, which retails for \$99.95.

There were no salesmen at this end of the floor. But down at the other end, where the electric refrigerators were massed, there were six salesmen. One of them gave us the Norge Rollator story in a manner that

would have delighted the heart of Johnny Knapp.

Leaving, and coming back by way of another and more distant entrance (the place is that big), we had another salesman tell us about the Grunow low-pressure unit and carrene. This, too, was a surprisingly good presentation.

There are 14 of these salesmen (they work on the floor on alternate days, spending their off days ringing doorbells and following up leads—extra "outside" sales are rewarded with extra days on the floor, where the hunting is easier) and if they are all as proficient in the art of delineating the competitive features of an electric refrigerator as these two, then it isn't hard at all to understand how the Gimbel Bros. store in Philadelphia sells from 3,500 to 4,000 electric refrigerators annually.

On the floor were Universal Cooler, Kelvinator, Leonard, Norge, Grunow, Mayflower, Frigidaire, General Electric, and Welsbach electric refrigerators, and Electrolux gas refrigerators.

It's pretty hard to say which of these brands is the best seller in the group, according to the salesmen. In general, the makes which are best advertised nationally are the ones which draw the most prospects. But demand varies according to which make is being featured in current Gimbel advertising.

Just now it's Universal. The store is advertising: "Seven carloads of Universal refrigerators have been purchased from the factory at Detroit, and are on special sale at prices ranging from \$89.50 to \$179.50. Trade-in allowances of \$5.00 to \$15.00 a box are made." The response has been excellent, as was expected.

Chest Models Ignored

One Leonard and one General Electric chest model are on the floor, but prospects almost uniformly ignore them, the salesmen report. Customers are used to the front-opening refrigerator, and refuse to recognize this new type. The salesmen also admit, when pressed, that they don't push these models.

"Why should we?" asked one, in explanation, "We only get 50 cents per box commission!"

John Daley, energetic and sophisticated young manager of Gimbel's refrigeration department, was demonstrating a big two-door Frigidaire to a prospect when we arrived.

The prospect, an attractive young woman, had been brought into the store by a user—another pulchritudinous young matron who had purchased a Frigidaire at Gimbel's two years ago, and who wanted to be sure that her friend went to the right place.

Mr. Daley banks heavily on satisfied users to furnish him with pros-

pects, and toward that end he bends plenty of effort (like W. C. Fields, Mr. Daley comes from a long line of effort-benders) to see that users are satisfied.

This is effected chiefly in two ways: (1) By educating the user, through cooking schools and home economics lectures, as to the best methods of utilizing her refrigerator; and (2) by insuring prompt and adequate attention to service calls at all times.

Service for most makes of refrigerators is handled for Gimbel's by the respective distributors. Nevertheless, Mr. Daley maintains his own service department, with a round dozen trained service men to call upon.

Chief justification for his own service department is the number of orphan machines in homes of customers. Take Welsbach, for instance. In 1932 Gimbel's bought a lot of 700 Welsbach refrigerators, so Gimbel's bought a stock of Welsbach parts, got hold of a couple of factory-trained service men, and was set for any and all emergencies on the 700 machines which had been sold. (The Welsbachs now on the floor at Gimbel's are repossessed jobs).

Mr. Daley relies on newspaper advertising to get prospects up to his department. In addition, he employs direct mail campaigns devised by the home offices of the various machines he represents.

Right now he is most proud of a General Electric Health Kitchen which has just been installed adjacent to his private office, and is working on the promotion of the all-electric kitchen idea (there's a Modern Gas Kitchen at the opposite end of this vast room). Already a number of likely prospects for complete kitchens have turned up, he claims, and countless more are now inoculated with the complete kitchen "bug."

Meter Users Often Converted

This year almost 50 per cent of the refrigerators moved by Gimbel's have been purchased via the coin meter route.

"Prospects are almost universally sold on the 15-cents-a-day idea," Mr. Daley reports. "It's very difficult to dissuade them from buying on the meter plan, especially in the spring. However, after they have had the refrigerator in their home for six or seven months, they frequently ask to convert their meter-purchase agreement into a regular time-payment contract, so as to save money."

Repossessions of refrigerators purchased on the coin-meter plan from Gimbel's are practically negligible, Mr. Daley claims. Reason is that all such sales are carefully checked by Gimbel's credit department.

"An efficient credit department, an adequate service department, a well-trained sales staff, and plenty of forceful advertising will sell a great many refrigerators—at a profit—anywhere," summarizes Mr. Daley.

Small Town Store Sells 100 Units in 6 Months

MARYSVILLE, Tenn.—More than 100 G-E refrigerators were sold during the first six months of the year by the electrical department of Profit's department store in this city of 10,000 population with approximately 2,000 connected meters.

The electrical department has shown a 3.8 times stock turnover in 90 days, announces President D. W. Profit.

Dayton Department Store Salesman Wins \$1,000

DAYTON — First of the grand prizes in Kelvinator Corp.'s national summer sales campaign, the "Barrel O' Fun" contest, went to a salesman whose firm, a local department store, only this year went into the merchandising of electrical appliances.

The salesman, R. Schroyer, of the Johnston Shelton Co. (The Home Store) here, received \$1,000 in cash.

Lit Brothers Store Has New Ideas To Promote Refrigerator Sales

Salesmen Are Trained to Close Sales 'Inside the Store'; 4,000 Employees Are Not Overlooked as Market

PHILADELPHIA — Exemplary of the manner in which a department store can develop sales of electric refrigerators without an outside, full-time selling force is the operation in electric refrigeration selling conducted by Lit Brothers store of this city.

Lit Brothers appliance department employs many ingenious tricks to turn attention to its electric refrigerators. For example, during the Spring and Summer enclosures telling about the store's refrigeration products are placed in statements and packages.

Lit Brothers handles Electrolux, General Electric, Grunow, Kelvinator, Leonard, Norge, Stewart-Warner, and Westinghouse models.

Principal factor in the Lit Brothers merchandising plan is the creation of an intelligent selling force. Salesmen are trained to give freely of their time to prospects, to give not less than a half hour even to prospects who seem only slightly interested. A checkup has shown that 90 per cent of all sales are closed on the floor, demonstrating the effectiveness of this salesman training.

Salesmen Get 6 Per Cent

The salesmen are paid a commission which averages a little more than 6 per cent.

The importance of location and layout has not been overlooked in the Lit Brothers refrigeration setup. The refrigeration section has been given a central position in the housefurnishing department. Overhead have been placed colored electric signs designating the different makes of electric refrigerators carried.

These signs not only make for vividness and color, but they may be seen from any distant point in the surrounding area.

In addition to this regular display, the refrigeration division has, during the main selling season, a display, and sales space on the main floor of

the store, adjacent to the main arcade.

A window display that is changed at least once a week is a permanent feature throughout the entire refrigeration season.

To stimulate sales periodically, Lit Brothers seeks the cooperation of the distributors of the various makes to offer "specials" during the period of the store's big sales weeks. Such "specials" are usually offered twice a year, once in the Spring and once in the Fall.

Newspaper advertising on electric refrigeration is placed at least three times a week. All the copy is prepared by the store's advertising department, so that the electric refrigerator advertising will fit in with the rest of the Lit Brothers copy.

A plan which Lit Brothers has found to be quite successful is that of following up, or calling on customers who already have electric refrigerators (by phone or personal call) to find out whether they are satisfied. If they are satisfied, the salesman asks if they know of anyone who might be interested in electric refrigeration. If they report that they are not satisfied, a service representative is dispatched to their home immediately.

Distributors Install and Service

Distributors of makes carried in the Lit Brothers stores do the handling, delivering, installing and servicing on jobs sold by the department store.

The complete and intensive program which Lit Brothers outlined to cover the outside market has not caused the appliance department management to overlook the market which exists among the store's 4,000 employees. The store's effort on selling its own employees is extended to employ mass meetings, picnics, and store parties. Enclosures in salary envelopes have demonstrated themselves to be productive of sales.

Macy's, Handling Leonard Exclusively, Starts Outside Selling to Boost Volume

NEW YORK CITY—Brand new development in the refrigeration sales activities of Macy's department store here is its adoption of outside selling to place itself in more vigorous competition with other large outlets which do not depend entirely on floor sales for their volume.

The store's refrigerator selling staff of approximately 25 men will not be obliged to do door-to-door solicitation, but will make follow-up calls in an effort to close sales at prospects' homes, or bring housewives to the store for further demonstration.

Macy's for more than two years has handled Leonard refrigerators exclusively, the account being held by E. B. Latham & Co., New York Leonard distributor. Previous to the start of its electric refrigeration merchandising, the store handled Leonard ice boxes, and has sold a total of 125,000 Leonard electrics and icers, according to Leslie B. Latham, vice president of the distributorship.

Except for newspaper advertising, few promotions are used by the outlet on refrigeration, but the former medium is used considerably, with quite some stress being placed on the hook-up of "the largest department store in the world and the oldest refrigerator concern in the world."

One reason Macy's management feels a variety of promotions unnecessary is that the store has a tremen-

dous floor traffic, estimated by Mr. Latham at 115,000 on a comparatively "small day," and as high as 265,000 on a day which is considered "especially good."

Salesmen are paid on a salary-and-commission basis, and are said by the distributor to be of an extremely high type. They are chosen with great care, and receive extensive training in refrigeration selling by both the store and the distributor. This instruction comes not only at the beginning of their association with Macy's, but continues throughout the year.

It is the belief of Macy officials that while the handling of a single refrigeration line has some drawbacks, the advantages accruing to the store more than compensate for them. Promotion is simplified, the reputation tie-up can be used effectively, and above all, salesmen can become expert at presenting the line. They can learn everything about it and their minds—and their prospects' attention—aren't diverted and garbled by other makes on the floor.

The company maintains a large display of Leonards in its housewares department, and another in the basement. Mr. Latham says that while the store is most active in refrigeration selling from March to July, it puts more-than-average effort on the line in off seasons.

RANCO THERMOSTAT

Accurate Temperature Settings

An important feature of the NEW TYPE KR is a steel main frame and case so rugged that accurate temperature settings are continuously maintained.

THE AUTOMATIC RECLOSING CIRCUIT BREAKER COMPANY
1300-10 Indianola Avenue, Columbus, Ohio

LIQUIDATION SALE of GRIGSBY-GRUNOW CO., INC.

makers
of

Majestic

RADIOS, TUBES
REFRIGERATORS

by order of the
UNITED STATES
DISTRICT COURT

PURSUANT to an order of the United States District Court, the Trustee in Bankruptcy of the Grigsby-Grunow Company, Inc., offers for sale all of the machinery, equipment, inventory, good will, patents, trade marks and trade names of the Grigsby-Grunow Company, Inc., as well as real estate and buildings used in the manufacture of MAJESTIC radios, tubes and refrigerators.

The machinery consists of the very finest makes of all types of metal working and wood working machinery, also a completely equipped tube plant, enameling plant and plating plant, all of which are in immediate operating condition.

The inventory consists of made-up parts, parts in process and raw materials for radios, refrigerators and radio tubes. The Service Department on all three items has been kept intact.

The good will consists of the name "MAJESTIC" as applied to radios, refrigerators and tubes, which name has been extensively advertised throughout the world, and which name is secured by copyrights in practically every country in the world. The good will, also includes many other names, trade names, patents and copyrights.

The real estate consists of factory buildings which have a floor area of approximately 950,000 square feet, and are suitable for almost any type of manufacturing.

The Trustee is authorized to sell at public or private sale, and is now prepared to receive offers for any part or parcels of the assets, which offer if satisfactory will be approved.

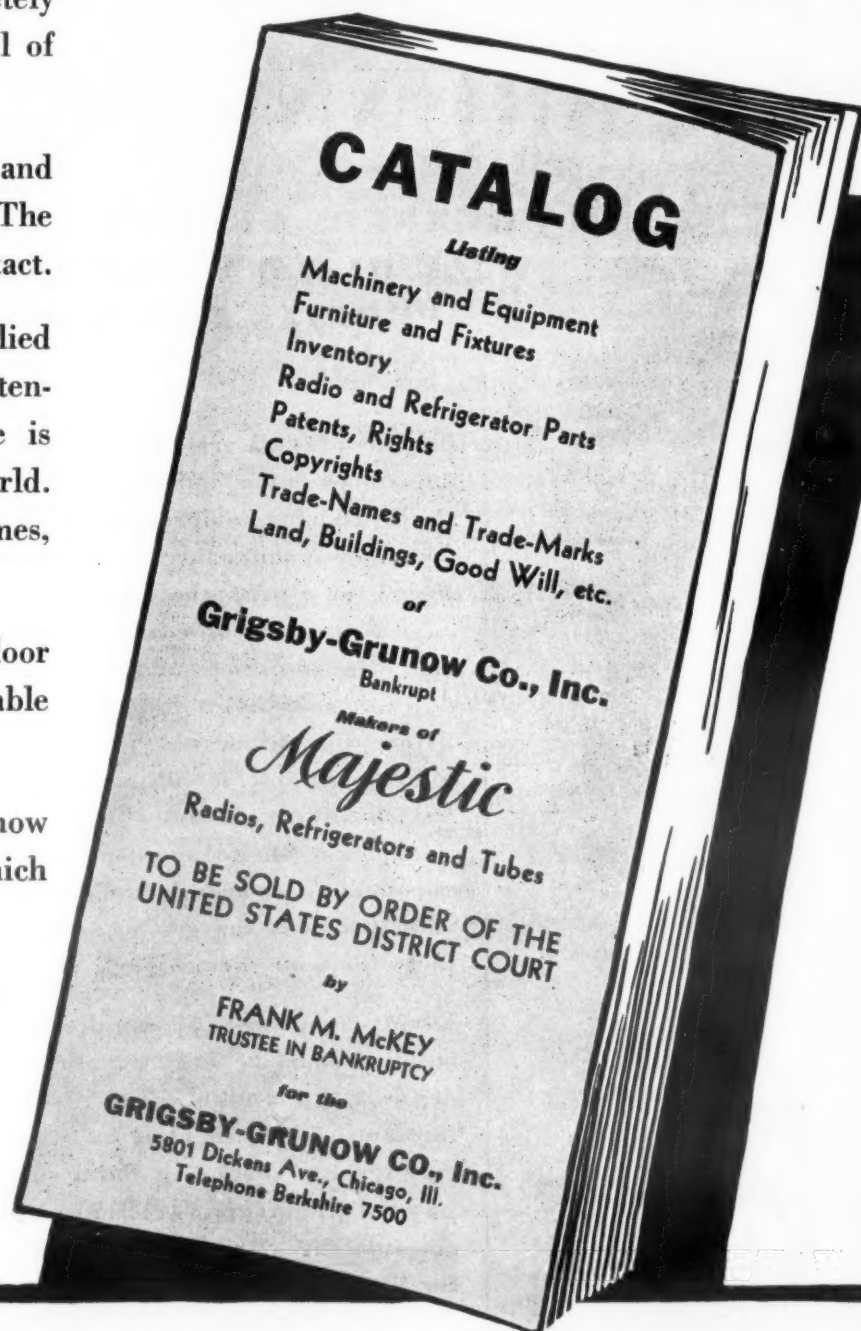
Full opportunity will be given to prospective buyers to inspect the assets. Competent salesmen will be in attendance at the plant, 5801 Dickens Avenue, Chicago, Illinois, at all times, and an early investigation of the property is solicited.

REFRIGERATION SERVICE DEPARTMENT

The Trustee, under order of the Court, has set up a Refrigeration Service Department, to maintain service and to sell service parts for refrigerators. This will maintain the name and prestige of "Majestic" before the public and be an asset of major importance to anyone buying the "good will" of the company.

SERVICE PARTS FOR RADIOS

There is on hand a considerable quantity of service parts for radios which are staple merchandise and are being sold to the users of the millions of Majestic radios now in service.



A complete catalog, listing the assets to be sold, has been prepared and will be available to any prospective buyer on request to Mr. Frank M. McKey, Trustee in Bankruptcy, Grigsby-Grunow Company, Inc., 5801 Dickens Avenue, Chicago, Illinois.

COMMERCIAL REFRIGERATION

General Electric Devises New Form for Recording Commercial Sales

CLEVELAND—Recently devised by the General Electric Co. is a new form sheet for "Equipment Specifications, Cost and Installation Order" for use by G-E distributors and dealers in recording commercial refrigeration equipment sales.

According to W. E. Landmesser, manager of the commercial refrigeration department, the new form is designed primarily to furnish the distributor or dealer with a true picture of his costs for a specific installation, in order that he may set his selling price at the proper level to make a decent profit rather than suffer a loss.

Four identical copies of the form are used for recording the details of each order, a white copy for the commercial department file, a yellow blank for purchasing and billing, a blue copy for the product department, and a pink sheet used as the master copy.

The number of the job, name of salesman, name, address and phone number of the purchaser, and the date of order appear at the top of the form. Following is space for quantity, model number, and description of G-E equipment used, with columns being allotted for cost to the distributor, selling price, delivery and installation costs, quoted price and gross. The same record is also set

up for equipment of other manufacturers used in the installation.

Terms of sale including down payment, monthly payments, list price and sales commission follow. The next section deals with costs of actual labor and delivery and installation, including freight and drayage, materials, labor, plumbing, wiring and alterations.

Next follows space for engineering data such as room temperature, total load, condensing temperature, condensing unit capacity, average refrigeration temperature and B.t.u.'s per hour for 14 hours. The last item on the front side of the sheet covers dates of approval for engineering, price quotation, credit, and equipment ordered.

On the reverse side of the form are spaces for date of installation and approximate time required for the installation together with the name of the man in charge.

Below is a record for technical data covering details of one or more condensing units, the controls, and the chilling units. The lower part of the sheet leaves room for date the equipment was reported installed and operating satisfactorily.

It is believed that the new form will materially assist distributors and dealers in determining their true costs.

Modern Refrigeration in Old Mexico



This Mexican creamery is equipped with Kelvinator refrigeration. At the left are two compressors and the control panel. At the right is a storage room, with two forced convection cooling units shown near the ceiling.

Frigidaire Coolers Sold To N. Y. Hotels

NEW YORK CITY—W. H. Barry of Frigidaire Corp.'s New York district commercial division has made a number of recent sales of beer and wine-cooling equipment to prominent wine-cooling equipment for installation in prominent hotels and clubs in this city.

Hotels now using Frigidaire equipment sold by Mr. Barry include the Prince George, New Yorker, Lexington, Park Central, Gotham, and Governor Clinton. Among prominent clubs in the city now using Frigidaire equipment to cool beverages are the Liederkantz and New York Athletic Club.

Frick Co. Describes Refrigeration's Uses In the Modern Winery

WAYNESBORO, Pa. — Refrigeration's part in wine making is described in a recent bulletin issued by the Frick Co.

Briefly, the operation of a winery in which refrigeration is applied is as follows:

"The so-called new wine after fermentation is cooled to a temperature near to its freezing point. In this the separation of nitrogen compounds, which are the food of bacteria or fermentation, takes place. At the same time, the reduced temperature causes the precipitation of tartaric acid and tartrate of calcium, and by the elimination of these compounds, gives the wine smoothness and mellowness hitherto acquired only through aging.

Purpose of Storage Tanks

"In order to completely separate the sediment, the wine is held in storage tanks in a refrigerated room at a temperature near its freezing point for a certain length of time, varying from 60 hours to five days, depending upon the grade of wine; heavy wines require longer storage periods than light wines.

"It is in the storage room that the artificial aging of wine is effected by blowing sterilized air through it for certain periods of time, constantly diminishing the length of time the air is applied, and then allowing rest periods between each air application. Presumably, during the rest periods the sediment is separated from the wine, and the oxygen injected into it is enabled to complete the chemical action which is incident to its application.

How Flavor Is Imported

"The air changes part of the alcohol within the wine to ether, and by virtue of this action imparts to it the flavor of old wine. Usually air is admitted to the storage tank through a perforated circular pipe of stainless steel which is located near the bottom.

"After the wine has been artificially aged in the cold storage tanks, it is delivered to ordinary storages, usually held at room temperatures, and is sterilized before it is casked or bottled. It is our understanding that the process is continuous. In other words, wine which has been refrigerated is constantly being transferred to the

ordinary storage and wine from the fermenters is constantly passing to the refrigerated storages. This fact indicates the application of heat exchangers to transfer the heat from the warm wine to the cold wine on its way to the refrigerated storage.

"It is, therefore, customary to provide a heat exchanger, in which the new wine is cooled from a temperature of perhaps 80° F., as it leaves the fermenter, to 45 or 50° F., before it passes to a double-pipe wine cooler, where its temperature is reduced to near its freezing point. Since the wine passes to the cold storage at the same temperature existing in the storage, it is necessary to provide only sufficient piping or cooling units within this room to overcome the heat leakage through walls, and other losses incident to the opening of doors, etc.

Specific Heat and Gravity

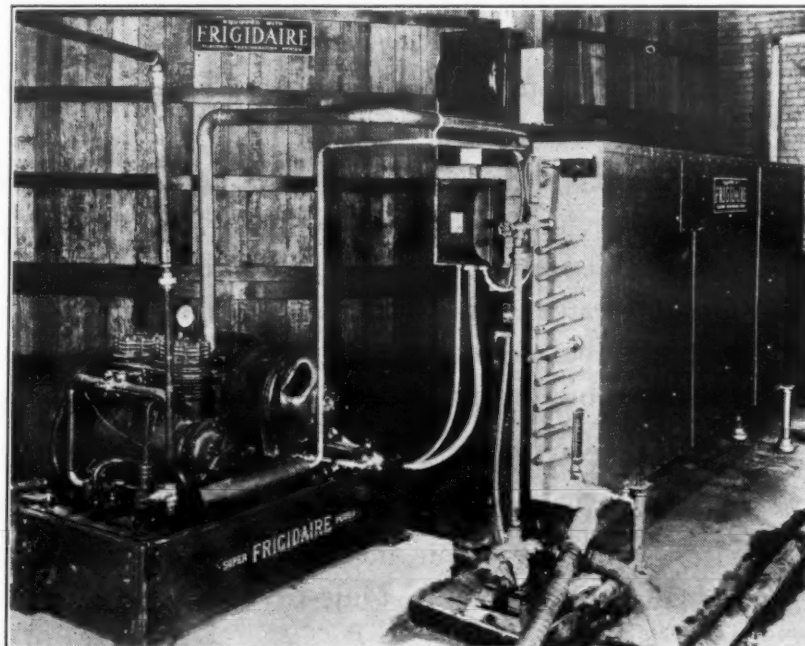
"The specific heat and specific gravity of wines depend, of course, upon their alcoholic content; however, for all practical purposes both the specific heat and specific gravity may be taken as one.

"The freezing temperature of wine depends upon the percentage of alcohol per unit volume, varying from plus 27° F. for ordinary red wines, to approximately 14° F. for wines containing as much as 20.7 per cent alcohol by volume. In a flooded type direct-expansion wine cooler or in a heat exchanger the heat transfer, with a wine velocity of 150 ft. per minute, will probably be in the neighborhood of 120 B.t.u. and will drop to 100 B.t.u. per hour at a velocity of 100 ft. per minute, and to 62 B.t.u. per hour at a velocity of 50 ft. per minute.

New Plant in Operation

"A complete Frick plant for wine cooling has just been put into operation by the Padre Vineyards, at Cucamonga, Calif. This comprises a 10 by 10 machine, 16 in. by 18 ft. MS condenser, pre-cooler-separator, trap, receiver and purger, a double-pipe wine cooler 12 pipes high by 20 ft. long, with stainless steel tubing for the inside pipe, and a wine heat exchanger of the same construction, but having the outer pipe lined with stainless steel. Float valve control is employed."

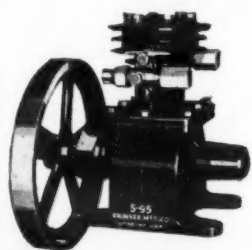
Wineries - - A New Market



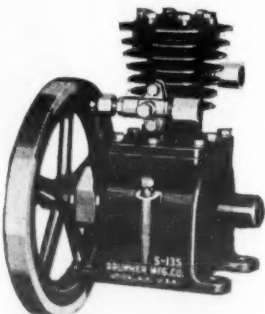
Since repeat new methods have been found to speed wine ageing processes by refrigeration. Installed in this plant are a large Frigidaire compressor and a modern wine cooler (shown at right in the picture).

Equip Your 1935 Models with BRUNNER Compressors

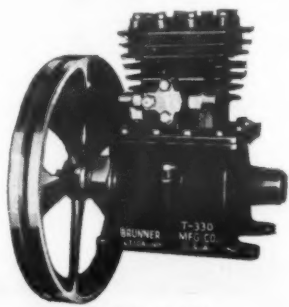
BRUNNER DEPENDABILITY WILL BUILD VOLUME AND PROFITS FOR YOU



Model S-95
1/6 H.P. Compressor



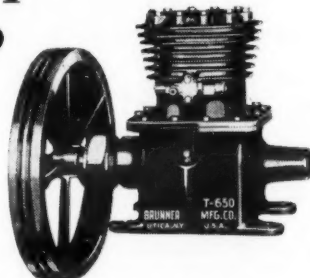
Model S-135
1/6-1/4 H.P. Compressor



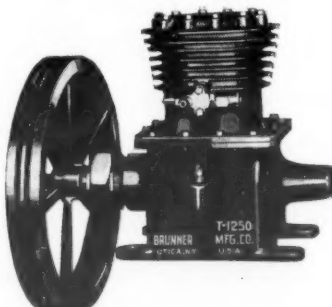
Model T-330
1/4-1/3-1/2 H.P. Compressor

Brunner, fastest growing name in the refrigeration industry, offers six dependable compressors to refrigerator manufacturers, each designed for a particular installation . . . all capable of rendering the type of service that builds satisfaction and goodwill for your product. Before you decide on your 1935 source of supply, it will pay you to investigate the Brunner line. A comparison of Brunner specifications and construction should convince you, you can get no greater value for your money.

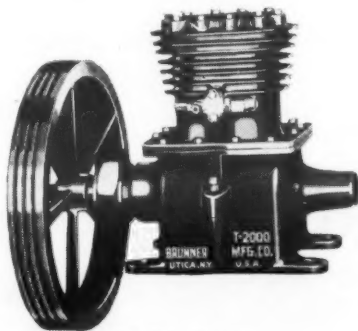
Twenty-eight years of compressor building stand behind every Brunner unit, the result of which is performance none can excel at economy few can equal. In short, you pay no premium for Brunner dependability. Mail coupon at once for illustrated Brunner catalog.



Model T-650
3/4-1 H.P. Compressor



Model T-1250
1-1 1/2 H.P. Compressor



Model T-2000
2-3 H.P. Compressor

BRUNNER

A Name Built by 28 Years of Service

BRUNNER MANUFACTURING CO.
UTICA, N. Y., U. S. A.

Send me your Refrigeration Catalog.

Name _____

Company _____

Address _____

COMMERCIAL REFRIGERATION

Field Man



LOUIS L. POPKY

Popky to Represent Taylor Freezer

BELOIT, Wis.—Louis L. Popky has been appointed eastern sales representative of the Taylor Freezer Corp., manufacturer of Taylor counter ice cream freezers, J. J. Tyndal, vice president, announced last week.

Mr. Popky will make his headquarters at Wilkes-Barre, Pa.

As a former distributor of Taylor freezers since 1926, Mr. Popky has had a wide experience in this field. He is a graduate of Pennsylvania State College.

Lexington Store Fitted By Cruse and G-E

LEXINGTON, Ky.—Cruse Refrigerator Co. display cases and commercial cabinets and General Electric commercial refrigerating equipment have been installed in the new Spic-n-Span market here. The general market handles a complete line of foodstuffs, and has several novel features, chief of which is a garage under the store in which customers can park their car.

Equipment installed consisted of two 12-ft. meat display cases, one 6-ft. three-shelf delicatessen display case, and a walk-in cooler.

Overhead coils were used in the display cases and a General Electric "conditioned-air" unit in the walk-in cooler.

NRA Ice Price Order for New Orleans Revised

WASHINGTON, D. C.—The National Recovery Administration recently announced revision of its order of August 8 which declared an emergency and established minimum prices for ice in Orleans, Jefferson, and Saint Bernard Parishes of Louisiana.

As amended, the schedule of minimum prices is as follows:

Wholesale—\$3.60 per ton at platform in quantities of 600 lbs. or more at one transaction, \$5.60 per ton at platform in quantities of less than 600 lbs.; heavy commercial—\$3.60 per ton at manufacturer's platform, \$5 per ton delivered; light commercial—\$5.60 per ton at manufacturer's platform, \$7 per ton delivered; domestic—36¢ per hundred lbs. at manufacturer's platform, 40¢ per hundred lbs. delivered.

Petrogas Drives & Cools Meat Truck

(Concluded from Page 1, Column 1) then passes through the diaphragm regulating valves "E" and "F" where, in two stages, the pressure is reduced to atmospheric. The dry gas then passes to the McCord mixing valve and thence directly to the intake manifold.

"Considered as a fuel alone," Mr. Tinkham claims "it is economical since it is marketed at approximately the same price, on a performance basis, as regular gasoline. It is further economical in that its use results in the total elimination of crankcase lubricating oil dilution, thus effecting a saving of approximately 50 per cent in oil costs.

Even Distribution Assured

"Being a dry and homogeneous gas when it enters the manifold, even distribution to each cylinder is assured and the hot spot can be dispensed with, thereby permitting a less expanded charge of gas to be drawn into the cylinders than in the case of a gasoline-air mixture. As this fuel has a final boiling point of 40° below zero Fahrenheit, and becomes a dry gas at higher temperatures, motor starting is never dependent upon a change in mixture, and is, in fact, easier than with the highest test gasoline," Mr. Tinkham declares.

"Having a high octane rating, it can be used advantageously on high compression motors. Even with motors of ordinary compression, however, high efficiency is obtainable through its almost perfect combustion. This, in turn, is a decided factor in reducing maintenance costs, as it is now known that the wear on cylinder walls and on valves is less due to abrasion than to chemical deterioration of the metal caused by incomplete combustion.

Refrigeration Capacity

"It should be noted in connection with this system that the amount of refrigeration which is created is in direct proportion to the quantity of fuel consumed by the motor and is equivalent to 180 to 185 B.t.u.'s per pound of fuel.

"On runs where the motor is under load or partial load for the greater part of the time, an excess of refrigeration may be produced, but such excess may be controlled thermostatically in a simple manner.

Performance Record

"On runs where many stops are made, where the doors of the refrigerator compartments are opened a number of times, and where the motor is idle for long periods, the refrigeration is still adequate," Mr. Tinkham states, "as will be seen from the following performance chart of the Lowenstein truck on June 4, 1934."

Truck left Wayne, 11:00 a. m.
Truck returned warehouse, 6:00 p. m.
Elapsed time, 410 minutes.
Engine idle, 130 minutes or 31 per cent.
Engine under load, 280 minutes or 69 per cent.
Number of stops made, 16.
Miles traveled, 120.
Load carried, 5,261 lbs.

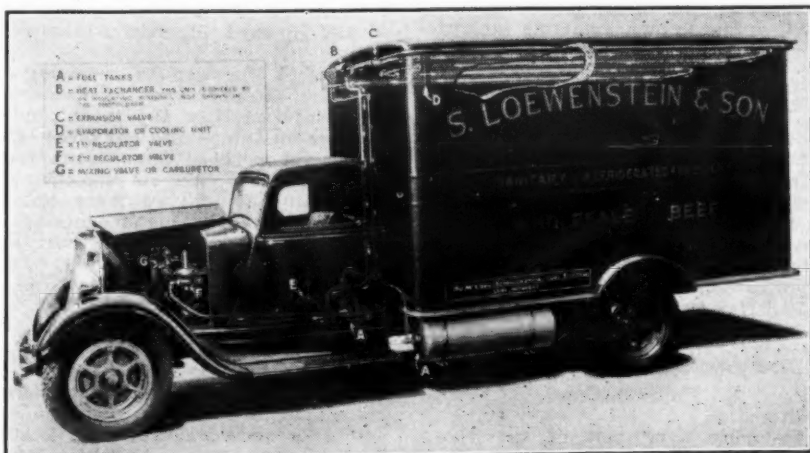
Hourly Temperatures

Time	U. S. Report ¹	Refrigerator Body
11:00 a. m.	85°	48°
12:00 noon	90°	42°
1:00 p. m.	91°	44°
2:00 p. m.	92°	46°
3:00 p. m.	94°	46°
4:00 p. m.	94°	46°
5:00 p. m.	93°	42°
6:00 p. m.	89°	44°

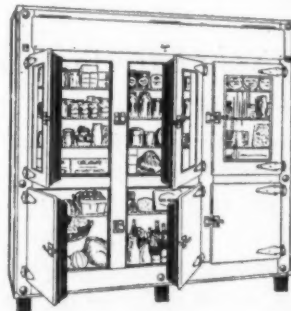
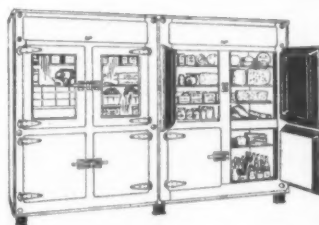
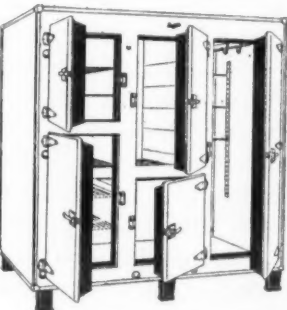
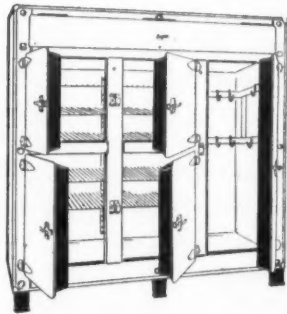
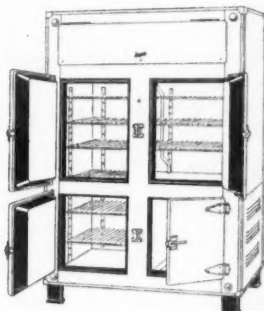
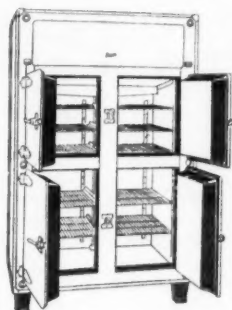
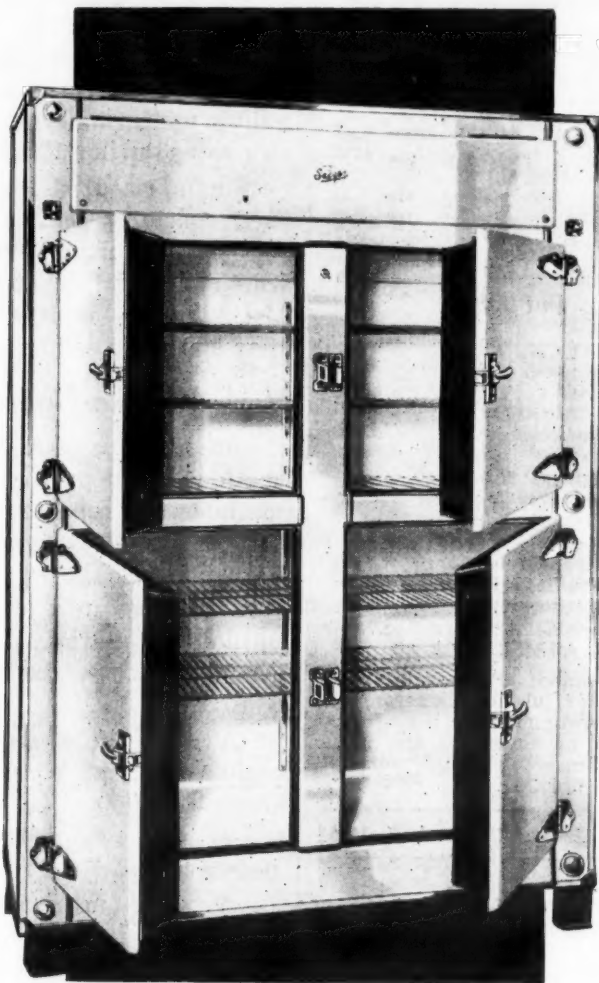
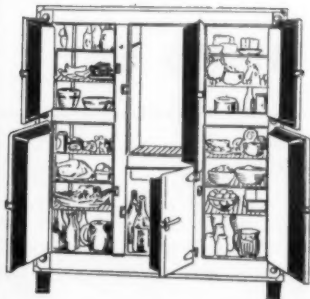
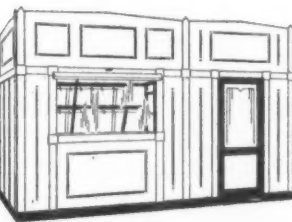
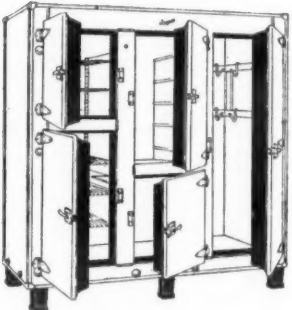
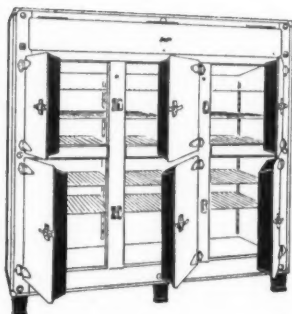
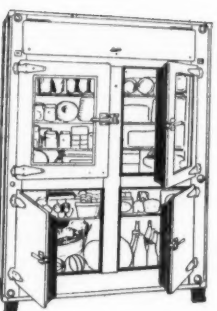
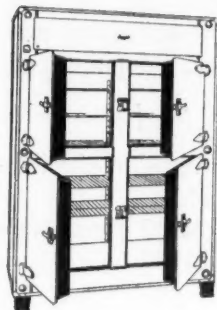
¹These reports were taken from the top of the Majestic Building in Detroit, and the figures are believed to be from 7° to 10° lower than the temperature at the street level.

²Truck empty at this point.

How One Gas Cools & Drives a Truck



Cut-away showing operation of McCord's refrigerated truck which uses Petrogas to refrigerate and then to drive the truck. A, fuel tanks. B, heat exchanger. C, expansion valve. D, evaporator. E, first regulating valve. F, second regulating valve. G, mixing valve or carburetor.



COMMERCIAL CABINETS

By

Seeger

With a background of over 30 years service to the world's most discriminating users of Refrigeration, Commercial Cabinets by Seeger are the accepted Standard of the Industry.

Commercial Cabinets by Seeger are built with the knowledge of the requirements and specifications, of successful merchants in Grocery Store and Meat Market trades.

Commercial Cabinets by Seeger have been consistently used in the finest Hospitals, Hotels, Restaurants and Clubs, where the best food is a requirement.

A large and varied line of Commercial Cabinets by Seeger is offered—with Cabinets to fill the requirements of the ordinary installation. For unusual requirements, the Seeger "Made to Order" Department may be called on for plans and specifications.

Commercial Cabinets by Seeger are sold through Dealers and Distributors of Electrical Refrigeration.

For complete details write to the

SEEGER REFRIGERATOR COMPANY
SAINT PAUL, MINNESOTA

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Boston, Mass. Philadelphia, Pa.
San Francisco, Calif. Buffalo, N. Y.
Chicago, Ill.

ELECTRIC REFRIGERATION NEWS

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EDITORIAL AIMS

To encourage the development of the art.
To promote ethical practices in the business.
To foster friendly relations throughout the industry.
To provide a clearing house for new methods and ideas.
To broadcast the technical, commercial, and personal news of the field.

VOL. 13, No. 5, SERIAL NO. 289, OCTOBER 3, 1934

Proved Methods

DEPARTMENT STORES are no longer regarded with fear by the electric refrigeration industry. Today they are regarded with respect. Instead of being the *upsetter* of electric refrigeration merchandising technique, the department store has become the *pace-setter*. From the moving of cut-price "jillipy" refrigerators by catch-as-catch-can methods, department stores have progressed to the setting up of special refrigeration divisions, with expert supervisors, trained salesmen, and definite promotion programs of highly constructive nature. And the result has been that department stores have "arrived" as a major merchandising force in the electric refrigeration business.

Advance estimates as to the proportion of this year's total sales which will be made by department stores run roughly from one-fifth to one-third.

Taught By Manufacturers

It should be noted, however, that department stores should not take all the credit for their excellent record in selling refrigerators last year and this. One of the reasons why they have done so well is that *manufacturers have shown them how*. The principles of specialty selling are basically opposed to fundamental department store merchandising theory. Their introduction into department stores was at first fought bitterly. Most department stores have now come to specialty selling, however, as the only logical answer to the problem of moving electrical appliances in profitable volume.

"From years of experience," declares D. F. Kelly, president of The Fair store in Chicago and past president of the National Retail Dry Goods Association, "I have gained the firm opinion that electric refrigeration is not just another item that can be sold by 'over-the-counter' methods. Naturally, the department stores that have been most successful in the sale of electric refrigerators have been those that have organized properly to sell them.

Relatively Easy to Adopt

"Furthermore, any department store can increase its volume of electric refrigeration sales by having a specialty selling organization on this type of merchandise. I might add that it is relatively easy to adopt such specialty selling methods once the proper organization is made to tie up with the store's general sales activities. Stores should solicit the advice and cooperation of appliance manufacturers when organizing a department for the sale of electric appliances."

Charles T. Lawson, who until his promotion to the household sales managership of Frigidaire was the manager of that concern's department store division, produces the following figures on his 1933 business:

Of the total number of department stores handling the Frigidaire line, 44 per cent em-

ployed specialty selling methods. Three stores averaged \$40,000 worth of Frigidaire sales *each* during the year. In sharp contrast, the other department stores selling Frigidaire (56 per cent of the total), which do not employ specialty selling methods, averaged but \$6,500 in Frigidaire sales during 1933.

Summarized, those department stores which used specialty selling methods sold more than *six times* as many Frigidaires in 1933 as those which did not! That seems like sound proof to Mr. Lawson—as it should to 'most anybody—that specialty selling pays in department stores.

High Volume Figures Cited

Possibilities of high volume in electric refrigeration by department stores using specialty methods are reported by Mr. Lawson as follows (these are 1933 figures; 1934 will show much higher returns):

One store in a city of about two and a half million population did a volume of \$174,000. Another store did a Frigidaire volume of \$110,000.

A store in a city of more than 3,300,000 population did a Frigidaire volume of more than \$107,000.

A store in a city of more than 750,000 population did a Frigidaire volume of \$132,000.

A store in a city of more than 650,000 population did a Frigidaire volume of \$106,000.

A store in a city of more than 450,000 population did a Frigidaire volume of \$153,000.

A store in a city of 50,000 population did a Frigidaire volume of more than \$34,000.

It should be noted that these figures represent *only Frigidaire* sales. Nearly all department stores work on a multiple franchise basis; i.e., they handle several different makes of refrigerators. Hence, even though Frigidaire leads in the stores considered in Mr. Lawson's report, it should be remembered that the *total* electric refrigeration volume of these stores is probably considerably higher than the figures quoted above.

Specialty Selling the Accepted Method

No longer is it a matter of argument whether or not department stores have a place in the electric refrigeration picture. They seemed to have proved that conclusively. It is not a matter of conjecture whether or not department stores can make money selling electric refrigerators. That has also been proved to the entire satisfaction of a large number of leading manufacturers. Nor is the question of whether or not it pays a department store to adopt specialty selling methods for electric refrigerators open to serious debate. About the only questions remaining in the minds of hesitant buyers and department managers are: "What constitutes good specialty selling technique?" and "How can I *adapt* this technique to my particular store?"

It is in the hope of providing material for answering these questions that much of the editorial material in this issue of ELECTRIC REFRIGERATION NEWS was conceived and developed. In it may be found the methods and formulas of some of the leading department store merchandisers in the nation. Their observations are written in the light of practical experience. Publication of this material, it is hoped, will be a valuable contribution to the thinking of department store executives.

WHAT OTHERS SAY

Gang-Up

DAY by day TVA sends out reports on its power developments, its sales promotion of low priced electric appliances, its show rooms, low cost financing, etc. Last month its rotogravure paper, a promotion piece, was sent out to all prospective customers for appliances in the whole TVA community.

Meantime a storm is brewing. In *United States Weekly*, *The Wall Street Journal*, *Journal of Commerce*, in the publicity from the National Retail Dry Goods Association, in a booklet from the National Coal Association, in increasingly numerous editorials and speeches by anti-New Dealers TVA is a cynosure for attack.

Sample barrage from *United States Weekly*:
Federal funds are used to intimidate private power companies and force them out of business . . . Stockholders take heavy losses . . . Is this the "yardstick" for the confiscation of a 14 billion dollar industry?—*Tide*.

LETTERS

Potter Disappointed

Landsheft & Bonning, Inc.
810 Liberty Bank Bldg., Buffalo
Sept. 28, 1934.

Editor:

I can't tell you how disappointed we were in the article on Potter interiors in the Sept. 19 issue of your publication.

As a matter of fact, in the light of the information which the article contained on the new line, we feel that the photographic reproductions were a direct misrepresentation of the refrigerator of this year. As you no doubt noticed, the article laid particular stress on the porcelain enamel shelves and it was for that reason that we took special photographs to illustrate this feature. Had we had the slightest idea that for economy's sake or for any other reason, you would not have used them, we would have preferred to use no photographs at all.

Undoubtedly your intentions were the best in the world, but we feel that you did the Potter proposition a real injustice.

J. C. BONNING,
Vice president.

You Have the Wrong Party

McGraw-Hill Publishing Co., Inc.
330 West 42nd St., New York, N. Y.
Sept. 27, 1934.

Publisher:

The other day while waiting in a business office to see a man (not about a dog) I picked up a copy of the November "Blue Book." Imagine my surprise to find the story called "Weird House," by Francis M. Cockrell. If you are the author, my congratulations. I've always said that people in the publishing business need at least one hobby or avocation to keep them sane.

ARTHUR P. HIROSE,
Manager, Sales Promotion and Market Analysis Department,
Electrical and Radio Publications.
Answer: As previously noted in this paper, Francis M. Cockrell the fiction writer and Francis M. Cockrell the publisher of ELECTRIC REFRIGERATION NEWS are not the same man—although they may be distantly related. The author of "Weird House" is a young man, still in his twenties, who has distinguished himself as scenarist for the Metro-Goldwyn-Mayer motion picture studios and as a contributor to a number of popular magazines.

Refrigeration History

Alexandria, La.

Editor:

I am wondering if you have, in your statistics file, full data regarding the beginning of electric refrigeration, the advent of gas refrigeration and its change to air-cooled instead of water-cooled units and also the approximate number of these electric and gas units sold during the various years since they came out. I am preparing a paper in connection with this and I would like very much to have this information if you can obtain it without too much trouble.

I was very much surprised this morning to find that none of us knew when electric refrigeration started or didn't even have a good approximate idea.

FRANK C. LANDERS,
Trustee.

Answer: It is difficult to assign a date for "the beginning of electric refrigeration," for that could mean so very many different things—the date of the invention of the first refrigerating machine powered by electricity, the date of the invention of the first household refrigerator powered by electricity, the date of the first household electric refrigerator to come off the production line, the date of the founding of the first successful manufacturer of household electric refrigerators, etc. Even were you to settle on one of these points, there would be considerable dispute as to which company and which man really was the "first" in the field.

All of the known available information on the corporate history of early manufacturers of electric refrigerators is contained in the Sept. 5, 1934 issue of ELECTRIC REFRIGERATION NEWS, a copy of which will be mailed to you for 10 cents.

All of the known available statistics on sales of the various classifications of electric refrigerating equipment are contained in the 1934 REFRIGERATION DIRECTORY AND MARKET DATA BOOK, a copy of which will be mailed to you for \$3.00.

Honeymoon Extra

Putnam, Conn.

Editor:

Enjoying every bit of the News, couldn't ever go without it—even on my honeymoon—it's playing an important part.

I remain your subscriber one hundred per cent.

CAMIL DU FAULT.

Wish We Could

California Refrigerator Co.
1077 Mission Street
San Francisco, Calif.
Sept. 26, 1934.

Editor:

Come on out here and get acquainted. We will call in all the distributors, and give you a fine big luncheon. You will like California and San Francisco and our people.
CLARENCE F. "SANDY" PRATT,
President.

Answer: Invite us again in mid-winter.

The Empty Chair

Westinghouse Electric & Mfg. Co.
200 East Fifth St., Mansfield, Ohio

Editor:

What in the world has happened to that personal column of yours? The paper without it is sort of like an empty chair at the family dinner table.

I like the new type treatment of your sheet—but where's that personal column?

J. G. BAIRD,

Merchandise Sales Promotion Mgr.
Answer: See page 20 of this issue.

And Frank Wolf

Frank W. Wolf

779 Main St., Buffalo, N. Y.

Editor:

At our Cleveland Convention I got to talking about our disappointment through the absence of the "Bull Column," and that this organization profited greatly from these personal items and happenings.

I now find so many others of the same opinion that I must ask you to add our suggestion to others you recently printed that this page be continued. We shall be glad to contribute toward it.

With kindest personal regards, and always glad to see you.

FRANK W. WOLF.

Helpful in Selling

1524 K St., N. W.
Washington, D. C.

Editor:

Please send me your paper, ELECTRIC REFRIGERATION NEWS, for one year. I find it very helpful in my selling. Up to now I have had to borrow my friend's paper.

Enclosed you will find a check for the subscription.

H. A. SCHAAER.

Answer: If all the readers of ELECTRIC REFRIGERATION NEWS who borrow the paper rather than subscribe for it were laid end-to-end, they could probably pass one copy half way around the world.

Free to Uncle Sam?

Federal Emergency Administration
of Public Works
Washington, D. C.

Editor:

We are advised that you publish a Refrigerator Directory which gives full information and specifications on the various type of refrigerators. If this book is for free distribution, we would thank you to mail it to us, and enclose herewith self-addressed Government label for your convenience and economy in complying with our request.

C. M. McDONOUGH,
Director of Engineering
For the Administrator.

Answer: Yes sir, it gives full information and specifications, but it isn't free. The price is \$3.00 per copy. There was a time when we considered it sort of a privilege to give "Uncle Sam" any information he might want, without charge. Recent experiences with the tax collectors, the bank examiners, and others have given us a different feeling. We're not mad at the old man but we don't feel very happy about the way he does business these days.

It is our impression that a great many loyal citizens have suffered a shock in recent months as a result of certain manifestations of sharp practice on the part of the government. It is one of the saddest phases of the "New Deal."

Dollars and Cents

Allied Manufacturers, Ltd.
538 Howard St., San Francisco

Editor:

We look forward to receiving the ELECTRIC REFRIGERATION NEWS with more interest than any trade publication which comes into our office—have never yet perused one of the issues that I did not find out something of real value which we were able to convert into dollars and cents.

R. F. WHITEHURST.

Real and Valuable

Electric Invisible Kitchen
1487 Merchandise Mart, Chicago

Editor:

Permit us to tell you that there is no magazine or paper that comes to our desk more welcome than ELECTRIC REFRIGERATION NEWS. It certainly contains real news of the industry and is full of valuable information. In short, we like it.

EDW. J. RIEDY,
President.

DEPARTMENT STORES

Kansas City Store Boosts Sales by Spotlighting One Line at a Time

Jones Store Coordinates Efforts with Factory Promotion; Storewide Contest for All Employees Brings in Names

By G. E. Stedman

KANSAS CITY—By putting the spotlight on electrical appliances early in the spring and by concentrating on a single line of refrigerators at various times during the selling season, the Jones Store, a Kansas City department store, increased its electric refrigeration business over 400 per cent for the first six months of 1934, as compared with the same period a year ago.

The Jones store opened its electrical department on the first floor of the store early in March, using large and commanding space. This section of the first floor was called the "Electrical Progress Section" rather than merely "the electrical department." The first floor space made possible evening demonstrations and receptions.

During March, a two weeks' Electrical Show, drawing attention to the various major electrical appliances, was put on by the store. During this time it was estimated that more than 20,000 people visited the Electrical Progress Section.

Thirty specially trained electric refrigeration salesmen, who alternated every third day on the floor, were employed by the Jones Store during the Spring and Summer seasons. These salesmen were trained by representatives of various manufacturers on the technical and general sales points of the different makes.

The Norge line of household electric refrigerators was actively pushed (sometimes by the entire store or-

ganization) on numerous occasions. The management took advantage of every Norge "special" that the factory had to offer by featuring Norge models in a number of window displays and by storewide contests in which employees were given a one per cent commission for turning in Norge prospects who were later converted into buyers.

During the period of these storewide contests, "shoppers" in the employ of the Jones store were sent around to award the one per cent commissions to salespeople who had won them, thus encouraging other salespeople to submit names of prospects.

The Jones store entered every sales contest that was held by the Norge Corp. or its Kansas City distributor.

Once every month, the Jones electric refrigeration salesmen met in a combined "business and social" meeting with officials of the Norge distributorship, to go over the sales and engineering points of the Norge line.

During the heat wave, the Jones Store pulled an out-of-the-store stunt which threw the spotlight on Norge. A Norge model was placed out in front of the store on one of the best traffic corners of the city. The unit was kept running day and night, freezing ice cubes in a blistering temperature of 116° F.

In two consecutive days during the height of the season, 68 Norge refrigerators were sold at an average retail price of \$160.

The Jones Store salesmen are required to make a certain number of calls per day, and in case reports are not made on the stipulated number of calls, the salesman failing to make the report has to forfeit a certain amount of floor duty.

A crew manager holds meetings for the salesmen every morning for a half hour before the store opens, going into detail on all reports, new sales ideas, and contests.

In addition to the opening week activities, other special promotional effort has been carried out in the form of a one-week sales drive the first of June, a mid-summer campaign in August, and special demonstrations by home economists. The storewide contests, mentioned previously, were employed during these campaigns.

A complete line of each make carried by the Jones Store is on display at all times, each model being price tagged. This type of display together with the first floor location of the store offers shoppers an opportunity to make a quick inspection and comparison of the various models offered.

Kelvinator Department Store Sales Gain 261%

DETROIT—Sales of Kelvinator refrigerators through major retail stores were 261 per cent greater for the first three quarters of its current fiscal year than during the corresponding 1932-33 period, V. J. McIntyre, manager of the department store division of Kelvinator Corp., stated last week.

"This gain in sales accompanied a 177 per cent increase in the number of major retail accounts," Mr. McIntyre states, "and reflects the growing importance of department stores, furniture houses, outfitting companies, and music concerns in the marketing of the Kelvinator line."

Practically all the company's major retail outlets employ Kelvinator's Meter-Ator selling plan, Mr. McIntyre said.

New Orleans Store Holds to Old Policies in Selling Refrigerators

D. H. Holmes Co. Uses Meter Plan Successfully By Adherence to Strict Credit Rating Standard

By George Lehleitner

NEW ORLEANS—An electrical appliance selling operation that is "different" as department store operations go is that of D. H. Holmes Co., Lt. of this city. No bargain sales of refrigerators are indulged in, the store having repeatedly passed up opportunities to purchase lots of obsolete and discontinued merchandise that might have been placed on sale at bargain prices.

All sales and promotional activities on electric refrigeration have been confined to the three standard makes carried—Norge, Kelvinator, and Leonard.

During its more than 90 years of merchandising the store has shaped its policies in keeping with its familiar motto "New Orleans' Quality Department Store." For example, a hard and fast rule of the store has been "No Home Demonstrations" in order that each prospect may be assured that his refrigerator, when purchased from the Holmes store, is fresh from the crate.

Strict adherence to this policy has likewise caused the management to frown upon use of the meter plan as "bait" advertising. Meters are used, but in no instance is the meter-minded purchaser prevailed upon to buy on the conventional instalment plan basis (although this medium of purchase is, of course, available).

Says Jas. G. Aldige, manager of Holmes' electric appliance department, relative to the meter plan:

"Our experience with meters has been a very happy one; to a large extent our record of more than 400 per cent increase in electric refrigeration

sales to date this year, over the same period of 1933, is due to the fact that this year, for the first time, found us using the meter plan.

"The key to the satisfactory operation of the meter plan lies in the use of good judgment by the credit department, who should reject not only the poor risks but every doubtful one as well."

Principal advertising medium used by the store is the newspapers, supplemented by radio broadcasts and store window displays. A complete floor display of refrigerators is maintained very near to the main battery of elevators.

Eight salespeople are employed on refrigeration selling. They take floor turns every fourth day. Floor leads alone are not relied upon, as in addition to a vigorous "use-the-user" program, each salesperson is frequently supplied with lists of paid out and active accounts from the store's general ledger; these leads have returned a large number of sales.

Mr. Aldige, manager of the department, is an "oldtimer" in the specialty selling game, his experience dating back to the days when talking machines accounted for the principal part of the store's sales volume.

Although 1934 is his first year of contact with the Norge line he has already earned the rank of "Viking Chieftan," the highest possible honor that can be achieved by any Norge retail manager.

Sales in the Holmes store since April this year have totaled 402 refrigerators.

QUIET

—because of

VULCANIZED RUBBER CRADLE MOUNTING



The owner of an electric refrigerator or air conditioner doesn't want to "put up" with noises and vibration from the electric motor—and he doesn't have to—when that motor is a Delco. For in Delco motors, quietness is assured by a special *Vulcanized Rubber Cradle Mounting*. The rubber is vulcanized to two plates, one attached to the motor and one to the mounting bracket. These two plates hold the rubber permanently in



place, yet permit it to absorb all vibrational noises. Manufacturers know that owners appreciate the quietness which this feature provides. They know that they can always count on the quiet operation of Delco motors—just as surely as they can rely on Delco's all-round dependability and long life. As a result, they are turning to Delco more and more when engineering electric motors into refrigerators and air conditioners.



DELCO PRODUCTS CORPORATION, DAYTON, OHIO

DEPARTMENT STORES

Appliance Selling Takes Special Knowledge, Flint Store Finds

Smith-Bridgman 'Flopped' in First Attempt but Resale Operation Is Now Successful

By Elston D. Herron

FLINT, Mich.—How the oldest and largest department store in this city flopped completely at appliance selling, then turned its electrical department into a profit-maker by putting it on a resale basis is the story told by executives of Smith-Bridgman & Co. here.

It was in 1930 that the organization's management decided to start handling electrical merchandise. It took on washers, and did reasonably well with them. It added another product or two, and got results not altogether unsatisfactory. Then came refrigerators, and in them the store met its Waterloo.

Then and there its head men made a merchandising diagnosis and came very rapidly to the conclusion that, frankly, sales were poor because no one in the place knew how to sell the merchandise.

Lacked Specialty Talent

"We couldn't hit the ball," relates the store's President G. P. Jackson, "because we didn't have any specialty sales talent or experience. So we decided to get some right away—and from a company that could afford to have nothing but good talent."

"So we took on a General Electric resale operation in January of 1933. We let Caswell, Inc., Detroit G-E distributor, place under our roof some men who had a type of selling experience it would have taken us years longer to acquire."

"Today our appliance department, from a profit standpoint, compares favorably with our average good department, and we have found furthermore that appliances are excellent products to carry because they help our store build a reputation for offering a complete line of merchandise."

Strict Credit Policy

Thomas Pitkethely, Smith-Bridgman's comptroller is much interested in the doings of the appliance department because his is the task of approving or disapproving credit of the store's time-payment appliance buyers. (In the resale arrangement, the department store carries all time paper and makes collections.)

"We have found that the number of appliance repossession is we are obliged to make is in direct proportion to the care we take in okaying credit risks," he says. For a time, the appliance sales volume may not be so large as it might be if we were less strict in approving credit, but the number of appliances which stay sold is larger ultimately. We will not take less than 10 per cent as a down pay-

ment on an appliance except in rare instances."

Mr. Jackson comments on the store's credit-approval policies in this wise: "We are just as much concerned with the welfare of the appliance department as if it were our very own. Our reputation is at stake, because it operates under our name, and we would rather cause some ill will by rejecting credit of some customers than by yanking merchandise out of homes after it has been installed."

Appliances in Annex

The store's appliance department was originally located on the fifth floor, but since it became a G-E resale operation, it has been moved into a separate shop at the side of the store's main entrance. Manager Nelson McIntyre believes that while such a location may not be so good as one on the store's first or second floor, it is much better than any quarters above the second floor.

One advantage of the annex shop is that it can be kept open evenings, whereas it could not if it were in the department store proper. The shop is open every night during March, April, May, June, and December—the heaviest sales months—and during October, November, January, and February it is open two nights a week for schools on sales plans and new products to be used during the coming season.

Limits Size of Staff

One of the creeds to which Mr. McIntyre clings most closely in his managerial capacity is that use of too many salesmen makes an organization inefficient and unwieldy, so he has eight men working now, and goes up to 10 or 12 during peak seasons. "I never overload my staff. I prefer to keep few enough men that each of them can make a good living, and I've found that it pays in reduction of turnover rate. Every one of the eight men I now have has been here two years or more," says he.

The salesmen are rotated in such a way that each has one-half day of floor duty, then two days outside the store. The outside work is mostly follow-up calls on walk-in prospects, and visits to users. No cold canvass work is required. A man need not be an experienced salesman to get a job with this operation, but whether he has experience or no, he is not awarded floor duty until he has served the company four months.

Straight Commissions

"Our men are paid on a straight commission basis," the manager

states. "That is the best way to pay salesmen, but in my judgment we should go further and hold a part of their peak-season commissions, then ration it out to them during the dull months. Of course, as our appliance line is broadened, there is less necessity for this rationing, because there is something which sells reasonably well in any season."

The 72-year-old Smith-Bridgman company always has its advertising on page 3 of the local papers, and in or beside this advertising is that of the appliance store. Windows of the shop invariably carry appliance displays, but no spot exhibits are made in the department store itself.

A General Electric kitchen was installed on the store's fifth floor when the appliance section was there, but has been almost worthless as a promotion since the appliance display was moved to the annex. Now the kitchen is being moved to the annex also, where display tie-up can be made during the store's quarterly cooking schools, each of which comprises a week's daily sessions. In the past, the schools have attracted an average daily attendance of 108, according to the manager.

Radio Found Good

Radio advertising was tested by the appliance shop this year, and found to be quite effective. The quality theme is most commonly used in both newspaper and radio copy, price hooks being employed only during sales, special offers, etc.

Generally speaking, the shop doesn't try many promotional stunts, for Mr. McIntyre believes it isn't necessary to spend money on novel traffic-pulling schemes when the store is located in the heart of the downtown section, has good window space, and draws a good traffic anyway.

The operation dabbled in meter selling this year, but closed very few meter sales, and made little effort to get business of that type. Executives explain that theirs is a conservative management, and it was felt that meter selling is "going too far out on a limb."

Syracuse Store Finds Resale Operation Boosts Sales

SYRACUSE, N. Y.—A comparison of the operation of the electrical appliance department of the Dey Brothers & Co., local department store, under the direct management of the store and on a resale basis shows the latter plan to be more satisfactory, officials of the store have declared.

In February, 1933, Dey Brothers made arrangements with the Gould-Farmer Co., Syracuse G-E distributor, to operate its electrical appliance department on a resale basis. The department, which is located on the main floor, handles G-E major appliances. A complete line of electrical goods is carried and customers may purchase anything electrical from a wall plug to a complete G-E kitchen.

At least one of Dey Brothers' show windows is devoted to an electrical appliance display every other week.

The following analysis of sales is made on a six months basis from February to July inclusive, inasmuch as the electrical department, as operated on a resale plan, has not as yet completed two years of existence. From February to July inclusive, 1933, operating on a resale basis, total transactions of the department were more than double the same period of 1932, or before the resale plan was adopted. The average sale price, comparing the same periods, increased from \$2.05 to a figure in excess of \$5. From February to July, 1934, transactions increased approximately 35 per cent over the same period of 1933, with the average sales price exceeding \$10. In dollar volume the increase in sales for the six months of 1934, compared with the same period of 1933, amounted to 151.4 per cent.

In making comparison between Dey Brothers' operation of its electrical department previous to and following the adoption of a resale plan, consideration should be given to the fact that the department was not located on the main floor previous to the resale operation, and further that electrical appliances were sold through the houseware department, or, as in the case of refrigerators and washers, through a separate department.

Pursell Joins Staff of Phil Harrison Firm

NEWARK—Philip H. Harrison, president of the Philip H. Harrison & Co., General Electric distributor here, has announced the affiliation of A. B. Pursell with his company.

Mr. Pursell, for nine years connected with the Metropolitan Edison Co. at Easton and Reading, Pa., and the New Jersey Power and Light Co., will engage in special field work in connection with the distributor's sales promotion department.

Kelvinators for TVA Workers



Kelvinator refrigerators have been installed in 75 model homes built in Norris, Tenn., for TVA workers on the dam site there.

Location of Department Hinders Trankla Store's Appliance Sales

By Elston D. Herron

GRAND RAPIDS, Mich.—An insight into some of the obstacles confronting a department store in its efforts to handle major appliances profitably is given by J. Zweedyk of Chas. Trankla & Co. (Boston Store) here, who is soon to leave his position as manager of that establishment's G-E resale operation.

Location of the electrical department has had much to do with the fact that its sales results have not always been entirely satisfactory, in this man's opinion. For two years, it has been quartered in a street-level annex at the back of the main store, and is accessible through an arcade from the store, and from the street on which the annex fronts. A wide aisle leads from the shop's street door directly through the department and into the department store.

Problem of Location

In the first place, Mr. Zweedyk points out, the street on which the department has its main entrance is little used, and as a consequence supplies little shopping traffic. Secondly, it is impossible to seat many people in the department for cooking demonstrations because the center aisle would be blocked, making it difficult for shoppers to pass from the main store to the rear door, and vice versa.

Furthermore, the department lacks what Mr. Zweedyk calls a special kind of privacy which is important in appliance selling. "With this runway in the center of the department," he says, "a salesman can't tell whether a woman is looking for a washer or going somewhere else in the store. The aisle is in such a direct line with the door that shoppers aren't even slowed down enough to get a good look at our displays."

"Another thing—just about the time we get a prospect seated, some friend of hers comes walking through. Our prospect gets up to talk, and the salesman has to wait until she's through, then try to pick up his presentation where he left off with it."

Too Much Traffic

"It would be better if this department were just a little removed from the line of through-store traffic. We might not get quite as many people in the shop, but we would know that those who did stroll in were really looking for something electrical. And we would have fewer sales talks interrupted."

One of the operation's biggest problems has been to get traffic to the department, not through it. It has tried public cooking schools, special sales featuring some small appliance for \$1 or so, church baking sales. But none of these were so effective as a contest in which the public was invited to guess on the number of revolutions per minute made by the wheel of an automobile on display in the department.

Cooking schools to which the general public is invited are no good as a promotion, believes Mr. Zweedyk. "The women come early, get good seats, sit through the demonstration quietly, then clear out of the store like frightened deer when the prizes are awarded. Not a handful are really interested in the appliances. And practically the same group will be back the day following."

"To be a success, a cooking school should be an invitational affair, with salesmen permitted to invite only their best prospects. Attendance will be much smaller than the public demon-

stration, but the appliance-mindedness of the group will be much higher."

"Such a school makes an excellent opening for salesmen to continue their sales attempts on certain prospects. Of one thing you can be sure: Attendance at an invitational school won't be made up of people just looking for a way to spend an afternoon."

Salesmen's Cooking School

"Another good type of cooking school is that held for the salesmen themselves—where they put on aprons and help with the work. After a session or two like that, their sales presentations are almost invariably better. The men really know what they're talking about."

Another reason why Trankla's appliance traffic has not been large is that the store has carried very few housewares and house furnishings lines in the past, and so does not come readily to the mind of a Grand Rapids housewife when she thinks of buying something electrical for her kitchen, this man explains.

Still another difficulty has been the fact that the store does not carry the paper on time-payment appliance sales. "That not infrequently causes a strain in customer relations. When an old patron buys a refrigerator or range on time, she wants to pay us for it, and she is worried and dissatisfied when she learns that her money is really going to a firm whose name she never heard of."

Undoubtedly one way to keep sales up when the department's location is such that traffic supplies too few prospects is to do an aggressive job of outside selling, and Mr. Zweedyk has worked vigorously on this. Each of his nine salesmen is on the floor only one day a week, and spends the remainder of his time outside, doing both follow-up and cold canvass work. Ninety per cent of the department's sales have been made by outside selling.

In this connection, it is pointed out that another thing badly needed in the department is a room in which salesmen can meet for sales instruction and training. "Even the best specialty salesmen need a place where they can get together and acquire the pep necessary for work at the doorbells."

Vance Woodcox Speaks To Women Advertisers

CHICAGO—Vance Woodcox, advertising director of Kelvinator Corp., spoke at the opening meeting of the Women's Advertising Club of Chicago Tuesday, Sept. 18.

Advertising photography and a radio headline act were other features of the program.

TEMPRITE Instantaneous Cooling

"The leading cooler for water, beer and other beverages"

Write for Catalog

Temprite Products Corporation
(Formerly Liquid Cooler Corporation)
1349 Milwaukee East :: Detroit

Ask the Service Man's opinion of

ANSUL REFRIGERANTS

The service man is a good judge of quality in a refrigerant. That is why service men choose Ansul Refrigerants. They know they can rely upon them to provide complete refrigeration satisfaction.

SULPHUR DIOXIDE

Pure, bone dry and free from all foreign materials. Contents of every cylinder analyzed before shipment. Available at conveniently located warehouses. Cylinders from 2 to 150 lbs., ton drums and tank cars.

METHYL CHLORIDE

Fast freezing, stable and non-corrosive. Contents of every cylinder analyzed before shipment to assure low moisture and acid content. Available in any quantity, spot or contract shipments. Cylinders from 3 to 130 pounds.

Warehouse stocks conveniently located.

ANSUL CHEMICAL CO.

MARINETTE, WISCONSIN

COMPANION MERCHANDISE

New Washer Employs Water Action Only

WATERLOO, Iowa — The National Watermatic Washer, a new washing machine of revolutionary design, is being introduced by the National Metal Products Co. of this city.

The new machine is modernistic in design, has a stainless steel inside tub, and has all the working parts entirely enclosed.

The Watermatic washes clothes by water action alone, without the use of blades, fins, or reversing agitator. Clothes are washed by the cross currents and a "boiling" action produced by the off-center pulsator and baffle attached to the bottom of the tub.

The drier is operated by water pressure and has a heavy rubber bag into which clothes are put for drying. Water forced into space between rubber bag and aluminum drier tank presses the bag of clothes against the lid and surplus water is squeezed out of the clothes. There is no wringer or spinner.

The washer is operated by electricity, but the drier is operated by means of city water pressure from the faucet.

Interesting feature of this machine is the regulator switch, which may be set for a certain time and shuts washer off automatically when that time is up.

The model 100 Watermatic is equipped with standard make electric motor mounted in rubber. The pulsator, shaft, motor, and bearings are grease-packed at the factory.

Television Machine Has Premiere Showing In Chicago Store

CHICAGO—Television machine invented by U. A. Sanabria, and built by Horton Steel Works, Ltd., Canadian subsidiary of the Chicago Bridge & Iron Works, was exhibited to members of the press in the theater of Marshall Field & Co. department store recently.

A display of gowns and millinery by mannikens, under the direction of a Field official and a brief boxing match between two small boys, were televised at the preview. The movements were transmitted from a distance of 50 yards.

The marketing process for this new television process has not been fully determined. The inventor and manufacturer say, however, that it will be tied up with a telephone or light company in each community, so that facilities for collecting money for program's from set owners may be provided.

Examples of the possibilities of the new process, according to the sponsors, are as follows:

The president of a company could appear before his entire sales organization and deliver a message "in person."

Three hours of amusement could be provided for \$3 or \$4 a month, and the charge could be added to the telephone bill.

New Waffle Iron Uses Signal Light

EAST PITTSBURGH—The Sentinel, a new waffle iron with features such as the personal monogram, adjusting lever, and signalling light in the top of the iron, is announced by Westinghouse Electric & Mfg. Co.

The Sentinel waffle iron is chrome finished. A new grid pattern arrangement prevents the escape of steam at the handle. The base may be removed and used as a cookie or canape tray.

The monogram is inserted at the moment of sale. A simple decorative filler in place of the individual monogram is used if the customer prefers.

The new Westinghouse feature of the adjusting lever and signalling light in the top eliminates the dripping of batter over the lever and light. The ruby light glows until the correct baking temperature is reached, then goes out. When the waffle is done, the light glows again. The adjust-o-matic built-in watchman heat control enables the user to bake waffles of golden yellow, nut brown, or any shade between.

The Sentinel waffle iron is catalogued as WSA-4, 115 volts, 1,000 watts, shipping weight 7 lbs., and lists for \$9.95.

'Travelite' Dial Features Fairbanks-Morse Line

CHICAGO—Fairbanks-Morse Home Appliances, Inc., is now in standard production on 14 of the 18 models that will comprise its radio line, Mortimer Frankel, vice president and general manager of the organization, announced last week.

Prime feature of the Fairbanks-Morse line is the International "Travelite" dial with dual ratio tuning.

Advertising Raises Plane Of Living—Lasker

BOSTON—Militantly defending advertising in its present form and practice, Albert D. Lasker, chairman of the board, Lord & Thomas advertising agency, addressed the Boston Conference on Retail Distribution Sept. 25 on the subject "The Relationship of the Freedom of Advertising to a Free Press."

"So far as advertising is concerned," said Mr. Lasker, "those who oppose it as it existed, propose as a substitute such action, which finally must result in regimentation, or near regimentation, or producer and consumer alike. There will be no other alternative."

"I maintain that advertising has stimulated production by stimulating consumption. I maintain it has done it on so vast a scale as to bring about a higher standard of living among the American people than would have possibly existed without advertising under any system."

"Witness: that in those countries where the standards of living are highest the proportion of advertising is greatest. It is important to note that as the standard of living goes down the standard of advertising goes down. This is universal. Perhaps you will answer that I put the cart before the horse. Then, at least, you will concede that advertising is in fact a cause and not merely the result of these better standards of living."

"And when advertising stimulates production of the article advertised it stimulates in a large degree the velocity of business as a whole."

"A free press has been able to maintain itself in its freedom from all outside influences, including that of the individual advertiser, largely through total volume of the advertising patronage which it credited and deserved."

Thomas Chadwick Joins Graybar Co.

DETROIT — Thomas E. Chadwick, since 1931 a field representative of Kelvinator Corp., has accepted a sales executive position with Graybar Electric Co., Inc.

Mr. Chadwick will be general merchandise manager for Cleveland, Akron, and Toledo, in charge of the merchandising of Kelvinator products and all other electrical appliances sold by Graybar in those Ohio territories.

Mr. Chadwick has been active in specialty sales work for almost 20 years, more than a decade of which was spent in supervisory capacities in radio selling. From 1918 to 1924 he was manager of the radio and phonograph department for J. L. Hudson Co., Detroit, and from 1924 until early in 1931 was general sales manager for Cleveland Distributing Co.

Coming to Kelvinator in January, 1931, Mr. Chadwick served as an Ohio district manager during that year, and then was selected for field work in the company's then-newly-created department store division.



General Electric Ships Ranges to 11 Countries

CLEVELAND — General Electric ranges last year were shipped into 11 foreign countries—Colombia, Mexico, Palestine, Honduras, Bermuda, Belgium, Czechoslovakia, Peru, South Africa, Java, and the Dominican Republic—according to a report by J. R. Poteat, manager of the range division of General Electric's specialty appliance sales department.

So far this year, Poteat's report continues, sales have been made in six countries—Mexico, Colombia, Palestine, Bermuda, Chile, and El Salvador. One of the sales to Palestine was a GK60 electric kitchen. El Salvador, likewise, took a GK60. Sixty-four per cent of the range sales went to Mexico, and 15 per cent each to Colombia and Palestine.

Grunow Posters to Feature Schnell's Part as Designer

CHICAGO—A "scoop" is what the sales promotion department of General Household Utilities Co. is claiming on the fact that the new Grunow all-wave radios were designed and produced under the supervision of Lieut. Commander Fred H. Schnell, former short wave expert of the United States Navy.

A huge poster has been prepared for dealers, featuring Mr. Schnell's photograph and photostats from high naval authorities congratulating him upon his work in making short wave communication a success in naval operations.

New Standard Range to Retail for \$77.50

TOLEDO—Standard Electric Stove Co. has introduced a new electric range model, "Valley Queen," selling for \$77.50 f.o.b. Toledo.

This range has three burners, all 8 in. in diameter and either the open or enclosed type. The oven measures 16x18x14 in. with temperature control.

It is finished in ivory with black striping and covers a floor space 40 in. long by 24 in. wide by 36 in. high.

Jordan Talks on Radios To Birmingham Dealers

BIRMINGHAM, Ala. — Principles underlying the operation and tuning of short-wave radios were explained by Dr. J. D. Jordan, engineer of General Household Utilities Co., makers of Grunow radios, to dealers and salesmen at a meeting held recently by E. E. Forbes & Sons at the Tutwiler hotel in this city.

Preceding Dr. Jordan's address, a film depicting the manufacture of Grunow sets in the Grunow factories in Chicago and Marion, Ind. was shown by S. L. Sloan, Jr., manager of Forbes radio department.

Approximately 40 Birmingham radio men attended the meeting.

DISTRIBUTORS

We Scooped the Entire Industry.

The First Real New Appliance to Appear on the Horizon in Years.

Today this Opportunity is seeking a distributor in every important trading center. In six months every aggressive electric distributor will be seeking this product. It is one of those improved pieces of merchandise that comes along occasionally and makes huge profits for distributors, dealers and every one along the line.

This appliance has scooped the entire industry. It is a washer so different and so much better that tremendous sales success is assured. No other washer is comparable in any feature . . . the sales appeal is tremendous.

50 PER CENT LESS ELECTRICITY

Due to the patented method of operation the efficiency of this washer is astounding. This washer consumes only one-half the amount of current used by other machines on the market.

NO COGS . . NO GEARS . . NO CLUTCH . . Never Needs Oiling

It has no wringer to maim and mangle hands . . . nor does it have a spinner. A sensational new device removes the surplus water from a whole tubful of clothes at one time. It washes by an entirely different action. The minute a woman sees a demonstration of this washer she wants it, even

if she has a late model ordinary machine in her home.

The National Watermatic Washer plan of marketing will be entirely through electric specialty jobbers. The plan is set up with liberal profits for both distributor and dealer with modern merchandising and advertising help.

SELLS FOR LESS THAN \$100.00

Sales possibilities are unlimited. This is an opportunity that simply won't wait. Somebody is going to have the distribution in every section and that somebody is going to move swiftly to make important profits. We believe the logical distributor is one who has handled electric refrigerators and radios, because this Washer fills a gap in his business caused by seasonable buying. We know that aggressive organizations can build a big business on this one product in any section of America where electric appliances are sold.

If you have a sales set-up to distribute major appliances and have the financial ability to properly handle a product such as this new Washer, we urge that you wire or write us immediately for details of our plan. Arrangements are being completed daily with some of America's most successful distributors so we suggest that you act at once to get in on the ground floor of this big opportunity.

Address: General Sales Manager

National Metal Products Company
Waterloo, Iowa

INDUSTRY HIGHLIGHTS DURING THE SUMMER OF 1934

A Condensed Index of Important Refrigeration Industry News

The information indexed below is now available in Bound Volume No. 12 of Electric Refrigeration News, which contains issues from May 2 to Aug. 29, 1934. (Serial No. 267 to 284, inclusive.)

Note: A copy of Volume No. 12 bound in stiff paper board cover may be obtained by sending \$3 to ELECTRIC REFRIGERATION NEWS, 5229 Cass Ave., Detroit. Shipment will be made by express collect.

New Record for Nema

During the first six months of 1934, the 15 manufacturers comprising the Refrigeration Division of the National Electrical Manufacturers Association (accounting for approximately 88 per cent of the household refrigeration industry) sold 891,837 units—a new all-time record, and an increase of more than 60 per cent over the Nema figure for the first six months of 1933.

That fact, more than any other, tells the story of the tremendous activity within the refrigeration industry during the four months of 1934—May, June, July, and August—which is recorded in the issues of ELECTRIC REFRIGERATION NEWS bound into this volume (No. 12).

It was a period which saw not only volume but profits recorded by such firms as Kelvinator, Crosley, and Stewart-Warner. It saw price increases (notably Leonard, Copeland, and Grunow), and still sales went up. New monthly shipments records were established by Kelvinator, Leonard, Norge, Crosley, Frigidaire, General Electric, Westinghouse, Sears-Robuck, and Brunner. Carrier, leader in the air-conditioning field, enjoyed a 98 per cent increase. McCray, one of the chief factors in the commercial cabinet business, showed a rising sales curve.

Two old concerns in the industry were rescued from difficulties by energetic younger concerns: Winslow-Baker-Meyering (which had already absorbed Copeland and Zerozone) took over Trupar; and Potter bought Jewett. Servel quit the household electric refrigeration field, electing to stay in the commercial refrigeration business.

It was a prosperous and active four months for the industry.

Tennessee Valley Authority

Biggest news of the year in refrigeration was the entry of the United States government—represented by the Tennessee Valley Authority—into the business of merchandising electrical appliances. Through the medium of the Electric Home & Farm Authority, TVA offered to finance (at low terms) the sale of low-priced electric appliances, so that a load might be built on electrical power transmission lines leading from Muscle Shoals and other government ventures into the power business.

The demand of the government for lower prices, the resultant decrease in margins for distributors and dealers, and the aggressive merchandising of these appliances by public utilities have all combined to play hob with the refrigeration business in that territory.

ELECTRIC REFRIGERATION NEWS covered the situation in detail and at first hand, as may be seen by the following index of news:

May 9—Conventional-type sales promotion materials are to be used during the opening months of Electric Home & Farm Authority's program to sell cheap appliances in the Tennessee Valley. Young & Rubicam, Inc., is the agency.

May 16—Ten Atlanta, Ga., refrigerator dealers secure a temporary injunction against the Georgia Power Co.'s sale of TVA appliances, charging that such sale is harming their business. Arthur E. Morgan, chairman of the authority reports to President Roosevelt on TVA progress, and asks that the work be "continued and extended."

May 23—George D. Munger comes from the Central Hudson Gas & Electric Co. in Poughkeepsie, N. Y., to take the commercial management of EH&FA. William B. Phillips is assistant to the EH&FA president; Forrest Allen is made director of public relations. Interviews with Knoxville, Tenn., refrigerator dealers regarding their views on the TVA program's effect on their business.

May 30—David E. Lillenthal, president of EH&FA, announces opening of low-cost appliance selling in areas using TVA power and those served by Commonwealth & Southern Corp. utilities in Tennessee, Alabama, and Georgia. Alabama and Georgia dealers appeal to President Roosevelt to halt

sale of TVA appliances in their territory.

Mr. Lillenthal says EH&FA appliance promotion program in Tupelo, Miss., is a success. Alabama dealers meet with the EH&FA president to obtain a "fair and equitable" deal for independent appliance dealers in connection with the EH&FA program.

June 13—EH&FA announces provisions and rules of its plans to aid financing purchases of TVA appliances.

June 20—At a meeting of EH&FA representatives and members of the Dixie Club—a group from Alabama, Georgia, and Tennessee—the club pledged itself to cooperate with the authority program.

July 11—EH&FA agrees to finance retail sales of approved appliances by the Cartersville, Ga., municipal utility—the first utility not using TVA power to receive this aid.

July 18—Two Georgia dealers say TVA program is demoralizing their refrigeration business. Georgia dealers protest to Georgia Power Co. that its sales of TVA interim refrigerators is killing their own sales of other models.

July 25—Georgia Power Co. officially opens a nine-weeks campaign on TVA-approved appliances—refrigerators, ranges, water heaters.

Aug. 1—TVA completes arrangements to buy Knoxville properties from the Tennessee Public Service Co. Northern Alabama towns plan to use TVA power.

Aug. 8—Survey of dealer opinion on TVA program made by ELECTRIC REFRIGERATION NEWS. EH&FA's Commercial Manager George Munger declares the authority is not preparing for nationwide promotion of low-priced appliances.

Atlanta city council takes steps to obtain TVA power for the city. Georgia Power Co.'s Vice President Charles Collier answers criticisms of dealers. Forrest Allen, public relations director of EH&FA, outlines benefits of TVA appliance promotion program.

Aug. 22—Atlanta learns that it cannot obtain TVA power for at least two years.

Aug. 29—Gov. B. M. Miller of Alabama pledges his state's cooperation with the TVA program while in conference with EH&FA President Lillenthal. EH&FA plans to use traveling kitchen to promote low-cost appliances in rural Valley areas. Atlanta's official agent on TVA matters recommends that the city make legal preparations to buy TVA power when two years have elapsed.

Officials of the Tennessee Public Service Co. estimate that if purchase of the company by TVA is completed, preferred stockholders will receive between \$35 and \$40 a share, while common stock owners will get nothing.

Chest Models

Most startling innovation of the year in regard to new models was the introduction of the chest-type refrigerator. Built in response to the demand of TVA officials for an unusually low-priced refrigerator, these small models have a lid rather than a door, and resemble the old-fashioned top-icebox. Most of the leading manufacturers brought them out, their announcements coming as follows:

June 13—To sell for \$74.50 f.o.b. Cleveland, a new chest-type refrigerator to be known as the "Liftop," is announced by General Electric Co.

June 20—Frigidaire Corp. plans to market a \$77.50 lift-lid refrigerator, named the "Kold Chest," in August. Sealed machines are specified.

June 27—Kelvinator starts production on the 2-cu. ft. Kelvin Chest, lift-up model to sell nationally at \$77.50 plus freight.

July 25—A chest model refrigerator featured by the Shelvador principle in the lid introduced by Crosley. Price: \$72.50 east of the Rockies, \$75 west.

Aug. 1—EH&FA grants Crosley permission to use the TVA emblem on its chest-type refrigerator. Leonard begins quantity production on a 2-cu. ft. chest to retail at \$77.50. Norge makes first shipments of the Norgette, chest retailing at \$77.50 f.o.b. Muskegon, Mich. Westinghouse announces a 2-cu. ft. chest-type refrigerator to sell at \$77.50 f.o.b. factory, with a five-year service plan available for \$7 extra.

New Household Models

Other new household refrigerators announced during the period covered by this bound volume include:

May 2—O'Keefe & Merritt brings out a six-model line of refrigerators ranging upward in price from \$119. Three largest models are styled, three smallest have conventional design.

With prices starting at \$134.50, Westinghouse introduces its "C" line of seven refrigerators finished in porcelain or Dulux, and with an inside-of-door "Handy Tray" on larger models.

June 6—Three new models, embodying cabinet and mechanical refinements, comprise the 1934 line of Superfex kerosene-burning refrigerators made by Perfection Stove Co. Capacities are 5, 6, and 8 cu. ft.

June 13—Ranging in size from 4 to 7.6 cu. ft., seven new household models are placed on the market by Zerozone. The price range is \$116 to \$273.

June 20—A standard and deluxe series comprise Apex' new line, featured by cabinet styling, new compressors, and new temperature control on deluxe models.

New Commercial Equipment

Commercial refrigerating machines and cases announced in the News were:

May 9—Supplementing its existing line, Westinghouse introduces four new commercial compressors in 1- and 1½-hp. sizes, both air- and water-cooled. They are of the two-cylinder, conventional type.

May 23—Equipped with a water-cooled condensing unit, a new water cooler is added to the Kelvinator line.

June 13—York adds to its line two new Freon condensing units, consisting of a 3-hp. triple-cylinder and a 7½-hp. double-cylinder Balanseal compressor.

June 20—Crosley introduces a new "Kool-Rite" bottle cooler selling for \$117.50 f.o.b. Cincinnati, to replace the original "Kool-Rite" brought out last year.

July 4—Intended for separate installation or with Kelvinator vertical-type cooling units, three new ice makers are announced by Kelvinator Corp.

Aug. 1—Westinghouse begins marketing new 2- and 3-hp. condensing units of the open type and using Freon. They are hooded, and provide an air channel through the condenser or over the compressor and through the motor to remove all heat generated.

Aug. 15—Two new display cases and a new floral display box are brought out by McCray. One case is double-duty, the other top display, and both are available in 10- and 12-ft. lengths.

Equipped with coils of Seeger design, a new line of display cases for use with mechanical refrigeration is introduced by Seeger. The line is marked by a number of new design features.

With one coil behind the case, and another in the top, the 4100 model display case is announced by C. V. Hill for use with electric refrigeration.

A service load retarder between the top display shelf and bottom compartment is a principal feature of a new double-duty display case introduced by Holcomb & Hoke Mfg. Co.

Air Conditioning

Because air conditioning has come into its own for the first time this year, and because more and more electric refrigeration dealers have turned to the sale of air-conditioning equipment as a new source of income, ELECTRIC REFRIGERATION NEWS has devoted careful attention to the progress of the air-conditioning industry during the last few months. An index of the headlines of articles published on air conditioning is offered here, rather than a digest or summary, because of the wide variety and scope of the material published.

May 2—Carrier adds two store coolers and three Freon units; more than 100 Carrier dealers now handle smaller installations; 24 air conditioners in Kelvinator line; Fedders develops coils for air conditioning; new train will have York air conditioning, page 1. Self-contained, portable Westinghouse air conditioner operates at low cost and is easily installed. Fox builds year 'round conditioner; G-E offers complete air-conditioning equipment, page 9. Santa Fe will cool four limited trains; Trane conditioners are of four types; page 10. Humidi-Cooler to bring out air conditioning; Westinghouse refines air conditioners; air recirculated by Edwards system; page 11. Air-conditioning equipment classified by functions (summer, all-year, and winter); page 12. Manufacturers of humidifiers, page 13. Air-conditioning market ready for big year, according to field surveys, by S. F. Myers, general supervisor of air-conditioning dealers, Westinghouse Electric & Mfg. Co., page 17. Nance says comfort is new sales appeal, page 18. Installations of air conditioners using Freon, by W. W. Rhodes, sales manager, Kinetic Chemicals, Inc., page 20. New York fire department issues new regulations for F-12, F-114, and F-11, page 20. Carrier summarizes installations, page 21. 250-ton York system to condition air in Cincinnati department store, page 21. Westinghouse will put 400

floor units in newspaper office, page 23.

May 9—Air-conditioning studies reveal how employees' health is improved; Crosley designs air-cooled bed canopy, page 1. Hay fever victims' big market for air-cleaning equipment, page 6. Bright designs three new ice coolers, page 6. Patients withstand operations better in air-cooled operating room, page 6. Air-conditioning grilles must diffuse and direct air flow, by J. A. Germonpres, general manager, Uni-Flo Corp., page 7. Iig builds unit and multiple coolers, page 8.

May 16—Conditioned home being built for Fair; air-conditioning firms form association, page 1. Westinghouse introduces compressors for air conditioning up to 6-ton capacity, page 4.

May 23—San Francisco utility to aid in promotion of air conditioning; Philadelphia reports 25 air-conditioning jobs up to April 15; G-E will air condition new railway coaches; Frigidaire to cool new Union Pacific Pullmans; Carrier air conditions food market in Peoria, page 17.

May 30—Air conditioning has real demonstration at 1934 World's Fair; streamlined trains major attraction to crowd of 155,000 on first day.

June 6—35 World's Fair exhibitions are air conditioned; 705 tons of refrigeration now installed, exclusive of railroad cars; Savage Arms enters air-conditioning field; Edison Institute report shows extent of air conditioning use and variety of applications, page 6. Lee shows with drawings how various buildings are air conditioned, page 8. Savage Arms makes year 'round system; cabinet-type cooler is introduced by Lipman, page 11. Where air conditioning is installed at A Century of Progress, pages 12 and 13. Warm air heaters study conditioning, page 15. Associated system planning promotion on air conditioning, page 17.

June 13—Engineers to study air-cooling trends; air-conditioning systems need "vitalizing" units says Canadian; Carrier air conditions Cleveland restaurant, page 11.

June 20—Electric cooling to be tested in research house; Illinois professors report air-conditioning tests at Urbana, Ill.; Air Controls designs attic exhaust fan; new society meets in Chicago, inspects air-cooling exhibit; North Western using 84 air-cooled cars, page 11.

June 27—Frigidaire lists prices on new air conditioners; newly introduced models are self-contained; prices start at \$340; engineers study applications of comfort cooling; A.S.R.E. and A.S.H.V.E. also consider economics of air conditioning; Kauffman introduces two new conditioners; 50 Detroit Statler guest rooms cooled; how one Frigidaire room cooler gives comfort cooling for an entire house, page 6. Low diffusers minimize cost of cooling high bank room, page 7. Thompson describes problems in railroad air conditioning, page 8. Air-conditioned railway cars not in service (tabulation), page 8. Voltage fluctuations from air-conditioning systems discussed by McLenegan, page 9. Effective temperature urged for creating comfortable conditions, page 11. Correct load factor needed to calculate operating costs, page 13. E.T.L. tests give engineering data of conditioning units, by Gordon Thompson, assistant chief engineer, Electric Testing Laboratories, page 14.

July 4—Westinghouse unit conditioners used in New York bank; Emergency cooling system serves offices of the News when Detroit becomes hotspot of the nation, page 16.

July 11—"Forced" market bolsters sales of comfort coolers; smaller stores, offices, and homes big market during June, page 1. York develops table-high cabinet to deaden sound of condensing unit; 400 Auditorium systems installed since Jan. 1; New York cocktail bar and two offices cooled by Frigidaire; 500 attend Newark air-conditioning show, page 15.

July 18—Chrysler Motors introduces unit air conditioners; Walter P. Chrysler, Jr., to head company making year 'round systems; "air conditioning may remake world economic map"—Gregg; closely controlled air conditions used to test refrigerators, Westinghouse laboratory operates five insulated rooms with temperature and humidity control, page 14.

July 25—Carrier orders for air conditioning increase 98 per cent; air conditioned mines may speed up world gold production, page 1. Chrysler conditioner to retail at \$175; central system cools 12 apartments; Carrier installation in hotel laid out to eliminate noise, page 6. Unit air conditioners fit most jobs, says Westinghouse Dealer Thomas J. Charles; air-conditioning system combined with heating plant in confectionery store, page 7. How to estimate size and costs of an air-conditioning job; method of determining cost of installation and operation, capacity, and type of system are explained by H. P. Waechter, air-conditioning division, Brooklyn branch, York Ice Machinery Corp., page 8. Retail chain stores show keen interest in air conditioning;

hotels and restaurants say air conditioning boosts patronage, page 9. Five Baltimore theaters cooled by new Frick Freon machines, page 12. DePuy discusses motors for use in air-conditioning plants, page 14.

Aug. 1—How refrigerating units may be used for heating, by Sterling S. Sanford, sales department, Detroit Edison Co., page 8.

Aug. 22—Sloan says air conditioning will help lead recovery; Wabash line operates conditioned cars, page 1.

Aug. 29—Many visitors express their approval of the air-conditioned home of the News; Kelvinator plans to advertise comfort cooling this winter; 158 cooling installations reported in Chicago; New Maryland community has houses designed for air-conditioning systems; Westinghouse runs condensing units in oil bath for 24-hour period, by J. W. Speer, page 4. 10 installations made by York at A Century of Progress; "House in Sky" uses Frigidaire system, page 6. How to run tubing for air conditioning told by Servel men, page 8. 45 Cleveland business places have bought air conditioning; three S. S. Kresge stores are equipped by Conditioned Air Corp., page 10. Young Co. introduces line of unit coolers; research engineers study ozone content and vitality of air, by Dr. L. W. Chubb; Lewis to help architects and engineers with air-conditioning problems.

Service

In response to the demand of readers, ELECTRIC REFRIGERATION NEWS has published a considerable quantity of information on service during the last few months. Of particular interest has been the publication of complete service manuals for orphan machines. An index of some of the more important service articles which will be found in this bound volume follows:

May 23—How Noma services and rebuilds electric refrigerators, page 1. Compressor of wrong size will cause trouble; how an independent service man works with popular makes of refrigerators, page 12. Servel's new service program; service men granted two code exceptions, page 13.

May 30—Service instructions on Allison machine typical of ethyl chloride compressors, page 24.

June 6—Service problems and solutions for Allison refrigerators, page 18. 1,500 taking service course of Chicago Institute, page 19.

June 13—Welsbach service manual, page 12.

June 20—How to perform typical service operations on Welsbach refrigerators, page 14.

June 27—How to locate and correct faults in operations of Welsbach unit, page 16. Milwaukee company puts service on mail order basis; repair charges of independent service company on Frigidaire systems, page 17.

July 4—Service instructions for Rice methyl chloride machines, page 12.

July 11—Service instructions for Wayne sulphur dioxide machines, page 16.

July 18—Service instructions on Absopure commercial condensing units, page 16. Woman who heads up service firms tells how to build business; Pratt issues catalog of service parts, page 17.

July 25—How to test operation of large Absopure commercial units, page 16. New York firm services three makes of units, page 17.

Aug. 1—Servicing Absopure thermostats, pressurestats, float valves, and freezing units, page 20.

Aug. 8—Servicing Iceberg water coolers, remote and self-contained household refrigerators, page 16.

Aug. 15—U. S. Hermetic service manual, page 19.

Aug. 22—To service a system properly, understand all its parts, by Arch Black; hints on using leak detectors, by engineers of Turner Brass, page 4. Universal Cooler manual tells how to select and install tubing, page 6. Correct testing helps service man diagnose motor trouble, by Charles L. Chittenden, Refrigeration Motor Service, Long Island City, N. Y., page 7. How to service machines using automatic expansion valves, by D. D. Wile, Detroit Lubricator Co., page 9. Service Chart, page 11. Electric refrigerators used a rotary gear pump, page 15. Sales and service prove profitable combination for New York firm, page 20.

Aug. 29—How to locate service troubles on electric refrigerators, page 20. Motor servicing which can be done in field, by George C. Tatem, president, Electric Refrigeration Motor Co., Philadelphia; autographic register for use by service men introduced, page 21.

Dealer Codes & Associations

Encouraged, perhaps, by the efforts of manufacturers to get together on codes of fair practice, dealers in many cities formed associations and drew up local codes. These codes were summarized, or reported in full, in the (Concluded on Page 16, Column 1)

Index of Industry News Highlights

(Concluded from Page 15, Column 5)
following issues of ELECTRIC REFRIGERATION NEWS:

May 2—Dealers make closed territory agreement. Members of the G-E Specialty Dealers Organization (comprised of dealers in the distributorship of A. Wayne Merriam, Inc.) formulate a policy with respect to operating under a "closed territory" agreement.

May 16—47 Kansas City dealers adopt code of ethics; trade-in allowances and carrying charges established. Newly formed dealer association in Charleston eliminates price cutting and trade-ins.

May 23—Kentucky group draws up code of fair practice; booster fees, trade-ins, and terms regulated by agreement.

May 30—Kansas City dealers bar special bonuses.

June 13—Omaha distributors draft code of ethics.

June 20—Dixie Club dealers will cooperate with EH&FA.

July 4—Water Cooler Division formed by New York refrigerator group.

Aug. 8—Detroit distributors form cooperative association—Refrigeration Association of Michigan.

Special Features

Specifications for 37 household refrigerators, May 30; Superflex specifications, June 6; Coldspot specifications, July 11; specifications of chest models, page 1, Aug. 8.

Refrigeration Patents in this volume from numbers 1,954,807 to 1,970,509.

Description of air-conditioned home of ELECTRIC REFRIGERATION NEWS, Aug. 29.

Review of air-conditioning installations at A Century of Progress, June 6. Report on quality standards in ice box construction by consumer's advisory board, June 6.

Code for the electric refrigeration industry, June 13; approved amendments for commercial cabinet code, July 18; code of refrigerating machine group, Aug. 8.

Radio manufacturers seek exemption from Electrical Code, complete reports of hearing before NRA, Aug. 8, 15, and 22.

Codes which affect electric refrigerator manufacturers, distributors, and dealers, and fields of related interest, page 2, July 25.

Uniform schedule of carrying charges on deferred sales of commercial refrigerators, Aug. 8.

Special milk-cooling issue, July 4; special beer-cooling issue, July 11; special water-cooling issue, July 18.

Real property survey of cities, May 23, June 20, and July 11.

Elston D. Herron's visits to dealers, Rochester, N. Y., dealers, May 2; Carbondale and Newark dealers, May 9; Charleston dealers, May 16; Knoxville and Virginia dealers, May 23; North Carolina dealers and Lexington, Ky., May 30; Springfield, Ill., and St. Louis, Mo., June 6; Omaha dealers, June 13; Des Moines, St. Paul, and Minneapolis dealers, June 20; Milwaukee dealers, June 27; New York dealers, July 4 and July 11.

Exports of electric refrigerators, May 23, June 6, July 4, and July 18.

On the Line at the Starr-Freeze Plant



Inspectors in the Starr-Freeze plant at Richmond, Ind., are shown making a final check on the units of both household and commercial refrigerators as the assembled jobs near the end of the production line.

Cafe Air Conditioned By Kelvinator Units

OKLAHOMA CITY, Okla.—Perfect control of temperature in the Britling Cafeteria here appeared to constitute an unsurmountable problem, owing to the presence of a large, centrally located well that extended from the first to the third floor, but careful planning of a Kelvinator installation has solved the difficulty.

Six suspended-type and two floor-type Kelvinator air conditioners are employed to maintain proper temperature and humidity. Each unit is equipped with Uniflo grilles, and is so located and adjusted that the influence of the 16x30-foot well is negligible. The dining area totals 43,000 cubic feet.

Two 20-hp. condensing units, the largest in the Kelvinator line, serve the eight conditioners. Condensing water spray towers, using no city water except that necessary to compensate for evaporation losses, are connected to the condensing units, which are located in the basement.

A direct expansion system is employed, the refrigerant, F-12, being expanded directly in the air conditioning unit coils.

The installation was made by Richards & Conover Hardware Co., Kelvinator distributor for this territory, and Oklahoma Electrical Supply Co.

TVA Tupelo Program Brings Increase in Use of Electricity

TUPELO, Miss.—Business here is lighting up with cheap electricity. Home use of electricity has doubled with TVA rates, and business is following suit.

In March, 1934, first full month at TVA rates, 321 commercial customers used 58,700 kwh., an average of 183 kwh. per customer. In August, 1934, 353 customers used 100,301 kwh., an average of 284.14 kwh. per customer. The average cost per kwh. was 2.5 cents.

Here is the month-by-month story of the climb:

March	321 customers, 58,700 kwh.
April	333 customers, 65,400 kwh.
May	345 customers, 72,200 kwh.
June	344 customers, 84,300 kwh.
July	349 customers, 89,900 kwh.
August	353 customers, 100,301 kwh.

Hugh Warner, Electric Home and Farm Authority lighting specialist, has helped Tupelo business men with their lighting problems, and recently assisted R. W. Reed, president of the R. W. Reed Co. in re-lighting that company's department store.

The establishment's lighting fixtures had been in use 15 to 20 years, and connected lights totaled 5,500 watts, giving an average intensity of three-foot candles and an intensity as low as one-and-a-half and two-foot candles in some parts of the store. The minimum recommended is 10-foot candles.

In the shoe department today, 800 watts of connected lighting, in both men's and women's spaces, flood the sales floor with soft light, and the same change has come throughout the store. A total connected lighting of 18,050 watts has transformed the appearance of the whole interior.

Mr. Reed combined re-lighting with a general renovation. New paint has given a flat white finish which reflects at least 85 per cent of the light. Stock display tables have been lowered and modernized. A reserve stock which formerly lined one of the side balconies has been removed to a concealed space and this balcony houses new departments for children's ready-to-wear and luggage.

On the women's wear balcony, new fixtures give effective light and put the store into the lighting business. The portable lamps may be purchased from the floor where they are in use.

The store was re-wired for the new lighting. Floor plugs serve the balcony lamps. Direct fixtures of anti-glare design hang from the ceilings over the main floor spaces. Four large windows and two smaller windows were re-wired and re-lighted. The entire lighting renovation cost about \$900. Re-painting and other interior improvements added another \$300.

TVA rates cut the store's light bill two-thirds. Mr. Reed expects the savings to pay for the new lighting's added electricity. The 18,050 watts of connected lighting include:

Six 300-watt lamps and 39 200-watt lamps over the main floor; 33 15-watt lamps; four 300-watt indirect floor lamps on the balcony; two 35-watt indirect lamps on the balcony, and 16 100-watt lamps scattered in alcoves and recesses about the store.

Sparton Makes Fifth Shipment to Iceland

JACKSON, Mich.—Fifth shipment of Sparton refrigerators this year to its distributor at Reykjavik, capital of Iceland, has been despatched by the Sparks-Withington Co.

Sparton products—refrigerators, domestic radios, auto radios, radio tubes, and automobile horns—are distributed in 90 foreign markets.

Representatives or officials from foreign selling organizations who visited the Sparton home office at Jackson during the last three weeks were: Charles E. Forrest, Sidney, Australia; C. W. B. Rayner, Bombay, India; M. Sobel, London, England; J. M. Chauchat, Paris, France; E. A. Easley, Shanghai, China; Salve Stanbo, Oslo, Norway; Joseph Katzen, Johannesburg, South Africa; and Robert Moor, Durban, South Africa.

Mechanical Cooling Gives More Beer Per Barrel

NEWPORT, Ky.—Use of mechanical refrigeration for cooling beer gives Jake Heringer, proprietor of the Wooden Shoe Grill here, 75 additional glasses of beer per barrel, he states in discussing his 25 years as a saloon-keeper.

Mr. Heringer has a four-draft arm Frigidaire beer cooler and a 30 ft. x 12 ft. pre-cooling box with a storage capacity of 20 barrels and 30 cases of beer.

In addition to his beer equipment, this man has an eight-hole ice cream cabinet, a reach-in meat and dairy box and a display counter.

Leonard Distributes Prizes in Contest

DETROIT—Leonard Refrigerator Co. sales executives this week begin the distribution of grand prizes to star members of its sales force for their efforts in the summer selling drive. The awards brought the total value of the cash and merchandise distributed during the campaign to more than \$30,000.

John Treanor, Louisville, was awarded \$500, first of the 80 grand prizes for retail salesmen. Second prize, \$300, went to T. K. Swingle, Trenton, Mich. W. P. Trueman, Minneapolis, and W. E. Peterson, Salt Lake City, each received \$200. Awards of \$100 went to Ernest Fannin, El Paso; G. L. Bucklen, Toledo; W. J. Brown, Louisville; and William Modes, Detroit.

G. W. Mason, Leonard president, presented gold watches to nine members of the "Fence Busters' Club," salesmen who at the end of the contest's second, fifth, and seventh weeks were among the 25 leading "hitters." Winners of watches included A. C. troit.

Horner, Philadelphia; Walter Boyne, New York; Emil G. Faller, Louisville; A. C. Sizemore, Toledo; Benjamin Binder, Philadelphia; L. A. Loftus, Detroit; Ernest Fannin, El Paso; Paul Fannin, El Paso; and W. P. Trueman, Minneapolis.

Cash prizes, sponsored by Advertising Manager Sam C. Mitchell, went to outstanding wholesale representatives. Leading award-winners in this division were: G. W. Humason, El Paso, \$300; Paul Hoffman, New York, \$200; John Patten, Ft. Wayne, \$200; Harry Cohen, Omaha, \$100; J. Manning, New Haven, \$100; and L. Dunn, Des Moines, \$100.

Virtually every Leonard distributor, dealer, and salesman in the country took part in the campaign. Arranged as a huge baseball game, the contest embraced nine weeks, or "innings," with news of the "team standings" and "individual batting records" being carried to the field by a weekly newspaper, "The Scoreboard."

For contest purposes the Leonard organization was divided into 10 "leagues," in each of which there was an equal number of distributors. Retail salesmen in the territory of a distributor who finished first in his league became eligible for the grand cash awards, although hundreds of merchandise prizes were earned by salesmen whose distributors failed to win top honors.

The Detroit, Louisville, Omaha, Toledo, New Haven, El Paso, Salt Lake City, Peoria, San Diego, and Dodge City distributors were the "pennant winners" in the 10 leagues. Each received a silver cigarette humidor, bearing the carved figure of a baseball player, the gift of Godfrey Strelinger, Leonard sales manager.

100,000 Women Attend Frigidaire Schools

LOS ANGELES—Nearly 100,000 west coast housewives have had Frigidaire's conveniences brought to their attention this year in a series of cooking schools conducted by Safeway Stores, Inc., and the newspapers of about fifty southern California cities.

The series of schools started Jan. 31 and were just completed. In many cases overflow meetings were held, and many hundreds were turned away, according to R. G. Hutchinson, Frigidaire Pacific regional manager.

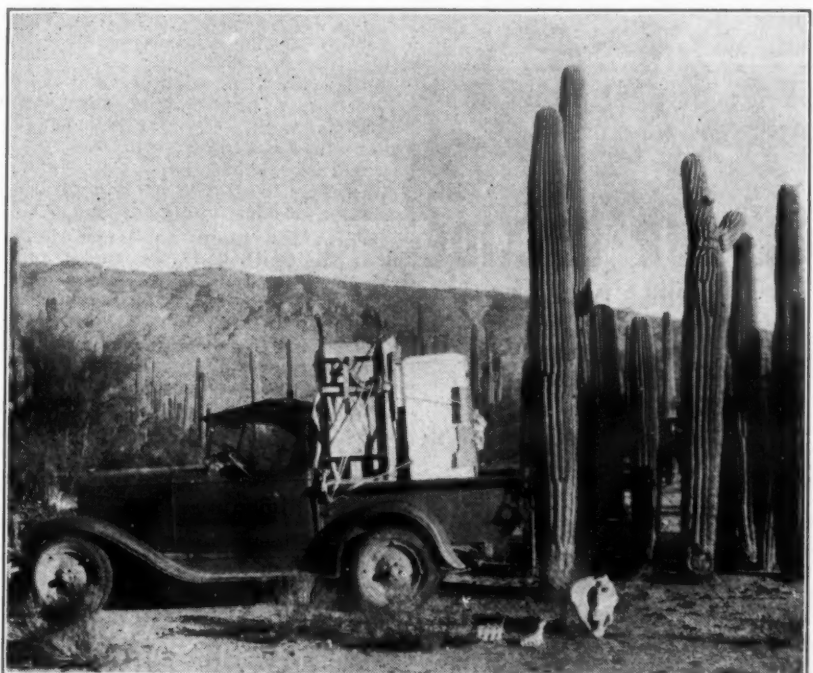
A Frigidaire was one of the attendance prizes.

One Star Performer Listens to Another



Mountainous Victor McLaglen, screen actor who co-stars with Edmund Lowe in many productions, gives his characteristic clinched-teeth grin as a snappy tune comes over the new Grunow all-wave radio on his "set."

Progress Reaches the Desert Wastes



E. E. Russell, Westinghouse dealer in Tucson, Ariz., specializes in selling to prospects in out-of-the-way places. Here he is on his way to deliver a refrigerator to a desert home owner.

DEPARTMENT STORES

Home Service Bureau Organizes Hudson's Refrigeration Promotion

Detroit Store Believes Bureau Is Partial Answer to Need for Consistent Promotional Effort

By Elston D. Herron

DETROIT—This is a record-busting appliance year for the J. L. Hudson Co., Detroit's leading department store. Since Jan. 1, its electrical merchandise sales have doubled those of last year, are even greater than in 1929. And it is a certainty that by the end of 1934, the department's net business will have soared over the \$1,000,000 mark.

What's behind this sales jump? J. B. Ogden, manager of the electrical department, believes three factors have been largely responsible. First, the ever-mounting appliance consciousness of housewives. Second, Hudson's hammer-and-tongs appliance promotion program. Third, the greater variety of electrical goods the store has to offer.

During the past few years, the number of Mr. Ogden's promotional activities has been large, and their success has many times been notable. But the manager has been, and still is, working toward something greater than success of individual projects.

Wanted—Promotion Machine

What he wants is a promotion machine—including, of course, a number of these special efforts—which will give the department a 365-days-a-year pull, interest housewives in Hudson's appliances at times other than sale weeks and bargain days. He wants a plan that not only creates interest, but maintains it.

At least a part of his wish was fulfilled last month with the opening of Hudson's Service Bureau, under direction of Mrs. Jessica Meek, economist formerly with the Detroit Edison Co. Mrs. Meek had been with Hudson's some months, but Sept. 12 marked the official start of her bureau.

With the help of several assistants, the economist will cooperate in promotional activities with several tenth floor departments, among which is the electric appliance department. The bureau sponsors twice-weekly cooking schools in the G-E kitchen, gives laundry equipment demonstrations, works with the table settings, china and glass, wall paper and paints divisions, and makes demonstration of household conveniences in the floor's four display kitchens. In addition, it gives free advisory service to any Detroit housewife on meal planning or other housekeeping problems.

Housewives Like Advice

"This type of promotion is exactly what we needed," comments Manager Ogden. "Women are highly receptive to advice on household management and meal preparation, and will flock to the Home Service Bureau to ask questions or witness cooking demonstrations. That makes traffic in our department good. Furthermore, it gradually brings housewives to rely on our home service, which means that when they need appliances they will just naturally come here to buy."

Even before it was officially opened,

work of the bureau was most satisfactory. In August, for example, it received 362 personal calls for help on menus, canning, etc.; 390 telephone calls for this type of information; planned one wedding reception and one children's party; mailed 87 recipes to customers, gave out a total of 600 recipes; made G-E kitchen demonstrations before 349 women; ushered 39,500 persons through the display kitchens.

Indoor 'Garden Party'

An indoor "garden party" was held to attract Hudson patrons to the bureau's formal opening, and 500 women visited it the first day, 700 the next. Two following days, Norge Corp.'s colored refrigerator display and playlet were moved to Hudson's from the Masonic Temple (where Norge had entertained several thousand Detroit women), and attracted a total of 2,200 more housewives to the appliance department.

In Hudson's refrigeration division are seven makes—Frigidaire, General Electric, Kelvinator, Westinghouse, Norge, Grunow, and another refrigerator bearing the Hudson name. The store formerly handled four other nationally distributed makes, but they have been dropped.

Number of Makes Reduced

"It is our tendency to cut down the number of lines," explained Mr. Ogden, "because by so doing, we can give more and better display space to the lines that sell best. Also, our carrying fewer lines makes it easier for a customer to select the refrigerator she wants to buy. Of course, one factor in our reduction of lines has been the need for display space for new products."

Hudson's likes to handle a refrigerator carrying the Hudson nameplate. The job doesn't sell in any great volume, but in the management's opinion, it is about the best possible instrument the store can have to protect and maintain its reputation for giving good values.

Mr. Ogden explains it this way: "In the first place, we can set and change prices on our own product without going through a lot of red tape, and that is becoming more and more necessary to the department store as chain store influence in the refrigeration market grows."

Chains Make Inroads

"Apparently, the big manufacturers don't realize what inroads the chains (such as mail order houses) are making, but we do, and we aren't going to stand idly by and let them get all the business in low-priced merchandise. With our own brand, we can nearly always be competitive in price."

The store gives much attention to good display. It recently constructed a special section for display and demonstration of laundry equipment, and when the Home Service Bureau began semi-weekly cooking schools, the appliance department raised its General Electric kitchen up on a dais to heighten the display effect, then installed another kitchen behind the original. In the "back kitchen," much of the food preparation work is done, so that the front kitchen will appear to best advantage during the demonstrations.

Public Address System Used

An amplifying system was installed, the demonstrators using lapel "mikes" as they work. At each session, recipes are passed out—recipes printed on good-sized sheets of thin cardboard that can't be folded into the size of a movie ticket and forgotten 10 minutes after the economist says, "That's all for today."

While the main appliance display is on the tenth floor, Mr. Ogden maintains an electrical department in the basement, too, to "capitalize on the tremendous traffic there," and to reach a class of people who might not otherwise ever see a Hudson appliance.

One of the store's windows is regularly devoted to appliances, and another window is used occasionally. There are three spot displays in the basement, and five in other parts of the store. At the Michigan State Fair recently, the store had a 150-ft. appliance exhibit.

11 Men Sell Refrigerators

On the tenth floor, 11 men sell electric refrigerators, ranges, and washers, while there are 10 more men in the General Electric resale operation (by Caswell, Inc., Detroit G-E distributor), and five selling these three items in the basement. Two men sell ironers, four sell sewing ma-

chines, two sell lighting fixtures, and four sell vacuum cleaners, with a number of men in the Hoover resale operation.

The G-E salesmen do outside work 60 per cent of the time, the 11 range-refrigerator-washer men are outside 30 per cent of the time, and the five from the basement store are out 20 per cent of the time. The ironer and sewing machine men do floor selling only, but one man is employed to do full-time follow-up work on these products. The lighting men do outside selling 75 per cent of the time, while the vacuum cleaner staff remains inside always, with one demonstrator doing full-time follow-up.

Kind of Advertising Used

Regarding advertising, Mr. Ogden feels that if the store itself does some institutional or "prestige" advertising, the electrical department can safely devote most of its space to straight selling. He believes, however, that some prestige advertising and copy on higher-priced merchandise is worth its cost because it heightens the department's reputation for handling high-quality merchandise.

Department Store Influence Growing, Asserts McIntyre

(Concluded from Page 1, Column 4)

a crack selling staff may show a good profit for the year, while a competitive concern with the same possibilities—but with an inferior sales organization—may do a very unsatisfactory volume.

It is often found that the store with a well trained sales group has an average unit sale of around \$200, while the outlet with salesmen not so carefully chosen or trained will come nearer the \$125 figure in the unit sale average.

Manager McIntyre asserts that very few stores today are handling refrigerators bearing their own brand names. "In 1932, there was a wave of special and off-brand merchandise, but stores found that price alone would not sell such goods. So the number of outlets handling it didn't just decline—it took a nosedive at the end of '32."

"In 1933, we opened many department store accounts in which we had to help liquidate stocks of off-brand refrigerators. They had been most unprofitable, yet when those stores began handling a nationally known make, their refrigerator sales operations became successful."

Very few department stores today require their salesmen to do house-to-house canvassing, but most outlets are insistent that their men make follow-ups on all good prospects contacted in the store.

While there is undoubtedly a greater volume of department store refrigerator advertising now than there was a few years ago, many stores have actually cut the proportion (to sales) of their advertising. But while there may be a lesser expenditure for advertising per unit sold, the results obtained are greater because of increased public acceptance.

NRA Ruling Prevents Ice Plant Building

(Concluded from Page 1, Column 5)

fare Council, and John S. Clement, Philadelphia manufacturer, held that the appellants had not sustained the "burden of proving that the interests of the consuming public will be best served" by construction of a new plant. In the ruling on the Kings County Ice & Fuel Corp. case the board detailed:

"The petitioner has not established that there is an inadequate supply of ice producing plants in the area which it proposes to serve. It has not shown that there has been or is any shortage of ice for consumption. On the contrary, it appears that the manufacturing capacity and the potential supply in the New York area is already much greater than any consumer requirements. The appellant does not claim that existing prices are exorbitant or that it would or could permanently reduce them or render improved service."

The board, without passing on the propriety of capacity control in the ice code, stated that while "such restrictions are unquestionably an innovation in our economic and legal system" when covering non-public utility industries, "it was apparently the intention of Congress . . . to authorize provisions of this character to be inserted into codes."

"Without attempting to decide whether the operation of the provision in the ice code requiring a certificate of public necessity and convenience as a condition for entering that field of industry tends to foster monopolies or improperly suppress small enterprises, we hold that such facts have not been established in the present case."

Art Students Design Showroom



DAYTON—Determined to have a distinctive refrigerator sales room, the Gas Refrigerator Sales Co., Electrolux dealer here, inaugurated a novel contest to gain its objective.

The contest was arranged among the students of the Dayton Art Institute who were interested in commercial interior decoration. An offer was made of three cash prizes for the best designs for a showroom.

Twenty-two designs in color were submitted and the first two prize winners were called into consultation to submit a final design which would incorporate the outstanding features of both designs. The two winners became so interested that they asked the privilege of doing the actual decoration jobs themselves.

Final result of this activity is a distinctive showroom. Center panel of the inlaid linoleum floor is a mottled green surrounded by two narrow tan strips, enclosing a dark green strip. Four feet from the walls the strips enclose a light green strip. A mottled black band runs to within a foot of

the walls where there is a strip of solid black encircling the entire room.

The lower six feet of the walls is a very dark blue, then in succession a silver stripe, a very dark blue stripe, another silver stripe, and a dark green stripe. This is surmounted by a yellow band on which a gas flame is worked at regular intervals, in blue and silver. Between the gas flames are a series of basic designs indicating foods.

Above the yellow are additional stripes of dark green and silver, then a 2-ft. band of light blue set off by a final silver stripe, completing the main wall design.

The ceiling, being high, was finished in cream with border of the same shade dropped down the walls to the silver band, broken only by a light blue stripe about a foot from the ceiling. Into this border are worked designs in bright colors of meats, vegetables, dairy products, etc.

The whole job done in oil paints, and excepting linoleum, cost approximately \$100.

4th Essex Electrical League Show to Open Oct. 6

NEWARK—Fourth annual electrical show sponsored by the Essex Electrical League will be held Oct. 6 to 13 at 70 Park Place here. Latest developments in radio, refrigeration, appliances, air conditioning, lighting, etc., will be on exhibition.

The public will see WOR radio stars broadcast from the crystal studio at the show, and other attractions will be featured, including the General Electric "House of Magic."

J. H. Stapleton is general chairman of the exhibition committee, with H. S. Stratton in charge of program, and R. H. Osgood in charge of sales.

J. J. Shriber to Represent Bellows Manufacturer

BOSTON—Clifford Mfg. Co., manufacturer of hydraulically formed metallic bellows, announces that J. J. Shriber has been appointed a Clifford factory representative for the Chicago district. Mr. Shriber has an office at 617 La Salle-Wacker Bldg., 221 N. La Salle St., Chicago.

NRA Sets New Prices For Ice in New York

WASHINGTON, D. C.—To end "ruinous competition" in the ice industry in New York City, and at the same time make possible the sale of ice at as much as \$2 per ton less than the rate now prevailing, the National Recovery Administration has issued an order, setting "emergency" ice prices.

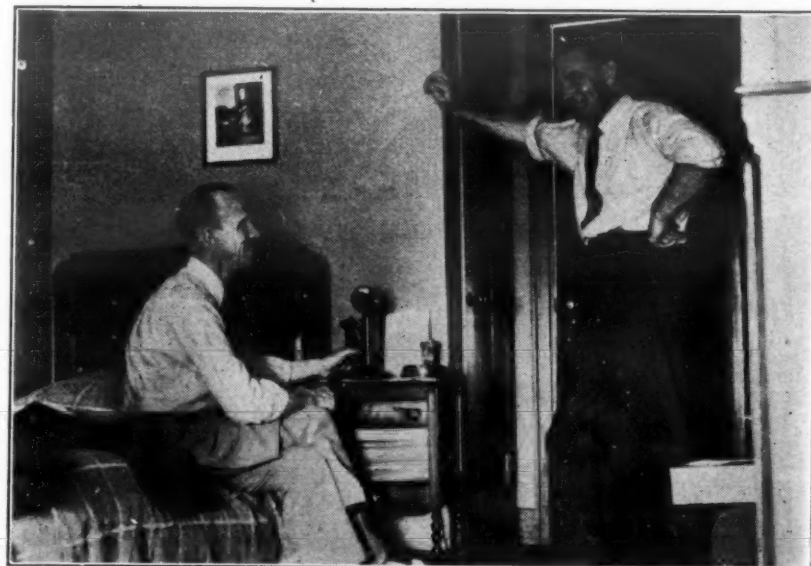
Minimum prices per ton at which manufacturers are permitted to sell, are as follows: To members of the industry, for resale, \$3.20 at the platform or \$4.80 delivered; to commercial users, not for resale, \$4 at the platform or \$6 delivered; to domestic users, not for resale, \$8 at the platform or \$10 delivered.

The delivered prices also apply in sales by wholesalers, loaders, dealers, and peddlers. Retailers may not sell a 100-lb. piece of ice for less than 40 cents, nor a 300-lb. piece for less than \$1.20.

The order became effective Sept. 27, and will continue for 90 days from that date.

New York City officials, by authority of a recent city ordinance, are empowered to rescind the license of any manufacturer, wholesale distributor, or retailer in the industry who fails to comply with the code.

Entertaining a Visitor from Australia



Arch Black (left) of Melchior, Armstrong, Dessau Co., with Frank Slessar, representative of an Australian refrigerator manufacturer, calls "room service." Temprite's John Wyllie was the photographer.

Calco

SO₂

SULPHUR DIOXIDE

TRIPLE DISTILLED

A PRODUCT OF QUALITY FOR REFRIGERATION

150 lb. Cylinders

THE CALCO CHEMICAL COMPANY

INCORPORATED

BOUND BROOK • NEW JERSEY

BOSTON • PHILA. • NEW YORK • CHARLOTTE • CHICAGO

A Unit of American Cyanamid Company

PACIFIC COAST REPRESENTATIVE

FRANKLIN G. SLAGEL

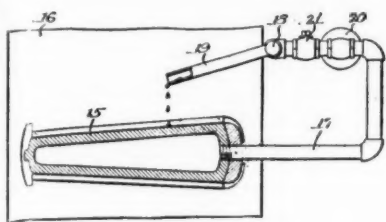
LOS ANGELES • SAN FRANCISCO • SEATTLE

PATENTS

Issued Sept. 18, 1934

1,973,729. HUMIDIFYING APPARATUS. Wilfred Shurtlett, Moline, Ill., assignor to The Herman Nelson Corp., Moline, Ill., a corporation of Illinois. Application June 15, 1931. Serial No. 544,453. 2 Claims. (Cl. 237-78.)

1. The combination of a heating radiator including a hollow core having a plurality of radiating fins mounted thereon, a



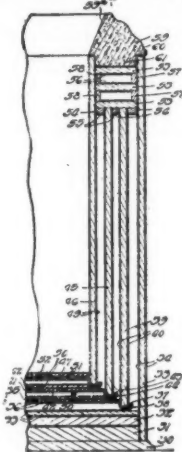
1,973,729

pipe connected to said radiator, a header connected to said pipe, a plurality of nozzles extending from said header between said fins and above said core, and a valve controlling the passage of fluid from the pipe to said header.

1,973,797. REFRIGERATOR ATTACHMENT. William C. Coulbourn, Suffolk, Va. Application Jan. 6, 1933. Serial No. 650,492. 7 Claims. (Cl. 259-113.)

1. Refrigerator equipment for agitating normally fluidal solidifiable substances, and comprising in combination a longitudinal receptacle, a cover removably fitted upon the receptacle, a shiftable rotatable screw shaft supported by the cover longitudinally thereof, a power means including an electrical switch and an electrical motor arranged to rotate the screw shaft, an agitating element supported upon the screw shaft and depending therefrom into the receptacle, said agitating element including a follower for the threads of the screw shaft whereby rotational movement of the shaft is translated into longitudinal bodily movement of the agitating element, and means to actuate the electrical switch upon longitudinal shifting movement of the screw shaft occasioned by the increased resistance offered to movement of the agitating element when the solidification of the substance being agitated reaches a predetermined value.

1,973,880. INSULATING UNIT. Virginius W. Moody, Long Branch, N. J., assignor to Reynolds Research Corp., New York,



1,973,880

N. Y., a corporation of Delaware. Application July 15, 1931. Serial No. 550,827. 4 Claims. (Cl. 220-9.)

1. A heat insulating container having

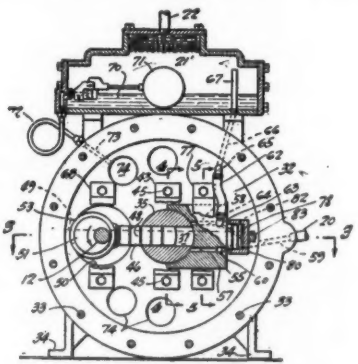
walls comprising a plurality of spaced apart insulating members, and a bottom comprising a number of spaced apart insulating members and adhesive material, said bottom insulating members each having thereabout a gutter, the lower edge of each of said first mentioned insulating members resting within the gutters about one of said bottom insulating members and said adhesive material being in said gutters and about the edges of said first mentioned insulating members for sealing and fastening their edges therein.

1,973,881. REFRIGERATING UNIT. Virginius W. Moody, Long Branch, N. J., assignor to Reynolds Research Corp., New York, N. Y., a corporation of Delaware. Application May 13, 1932. Serial No. 611,094. 17 Claims. (Cl. 62-91.5.)

1. A refrigerating unit comprising a storage compartment provided with walls impervious to the passage of heat and an opening to said compartment, in combination with a refrigerant chamber having walls resistant to the passage of heat and an opening to said chamber, a cover of heat insulating material for said chamber opening, and heat conductive members connecting the inner and outer surfaces of said cover, said refrigerant chamber being adapted to seat within said compartment opening exposing said chamber cover to the interior of said compartment, the heat conducting members being adapted to conduct heat from the interior of said compartment.

1,973,949. COMPRESSOR. Wilfred Fourness, Oakland, Calif., assignor to Fourness Development Corp., Ltd., New York, N. Y., a corporation of New York. Application Jan. 30, 1933. Serial No. 654,185. 14 Claims. (Cl. 230-175.)

1. In a compressor mechanism, an oscillating cylinder block, a piston arranged to reciprocate in the cylinder, means



1,973,949

forming a contacting seat for the cylinder, said means having a contacting seat for the cylinder, said means having an inlet port and an outlet port, covered and uncovered by the oscillatory movement of the block, said means also having a cylindrical surface that guides the oscillatory motion of the block, and means urging said seat forming means and block together.

1,973,981. AIR COOLER. George S. Hall, Chico, Calif. Application Aug. 4, 1933. Serial No. 683,633. 4 Claims. (Cl. 257-214.)

2. An air cooler comprising a row of spaced liquid circulating cooling units, an open ended casing in which said cooling units are mounted and engaging the peripheries of the cooling units, means to force air lengthwise through the casing, and means to circulate water into the bottom and out of the top of the cooling units, said cooling units including vertical zigzag passages whereby the coldest water of the upwardly rising flow will be thrown against the sloping walls of the passages to exert a maximum cooling effect on the air forced past and contacting with the walls of said passages.

1,974,025. ICE SHAVER. Kenneth R. Harmon, Norfolk, Va. Application May 24, 1932. Serial No. 613,804. 7 Claims. (Cl. 83-62.)

1. An ice-shaver comprising a casing having an inlet for the ice to be shaved, and an outlet for the shaved ice, the cas-

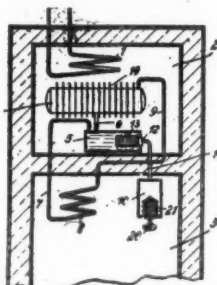
ing comprising oppositely-disposed first and second side plates, the first side plate having an outwardly projecting tubular bearing provided with a bore, the bearing being supplied at its inner end with a recess of larger diameter than the bore, a bushing in the outer end of the bore and provided with a laterally-enlarged head engaging the outer end of the bearing, a shaft journaled in the bushing, a securing device removably mounted on the outer end of the shaft and engaging the head of the bushing, a cap covering the securing device and removably mounted on the head of the bushing, a rotor in the casing and including a hub secured to the inner end of the shaft and engaging the bearing, within the recess, the hub and the securing device constituting means for holding the shaft against endwise movement, but for rotation, in the bearing, the inner end of the shaft being spaced from the second side plate, ice-shaving means carried by the rotor, and means for rotating the rotor.

1,974,043. METHOD OF MANUFACTURING BLOCK ICE AND PRODUCT. Crosby Field, Brooklyn, N. Y., assignor, by mesne assignments, to Flakice Corp., Wilmington, Del., a corporation of Delaware. No drawing. Application Dec. 24, 1929. Serial No. 416,295. 7 Claims. (Cl. 62-172.)

1. As an article of manufacture, a block of ice formed by subjecting to a freezing temperature a mass of substantially conchoidal fragments of sheet ice in the presence of sufficient water to fill the interstices therebetween.

1,974,121. CONTROL DEVICE FOR A HEAT TRANSFER SYSTEM. Wulff Berbelius Normell, Berlin-Charlottenburg, Germany. Application Dec. 16, 1932. Serial No. 647,668. In Germany Dec. 19, 1931. 3 Claims. (Cl. 62-5.)

1. A system for the transfer of heat, in which an auxiliary liquid is maintained in circulation by alternate evaporation



1,974,121

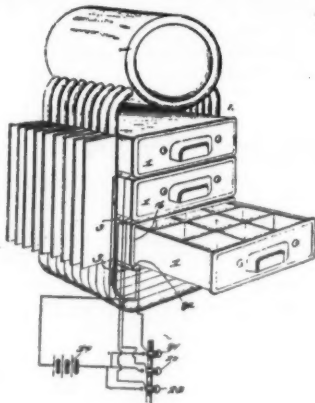
and condensation, a storage tank for the reception of the said liquefied auxiliary medium, an overflow rigidly connected to said storage tank, a bellows connected with said storage tank, and means for causing said bellows to change the level of said liquid contained in said storage tank.

1,974,145. AIR CONDITIONING. Harold V. Atwell, Bayside, N. Y., assignor to Standard Oil Co., Chicago, Ill., a corporation of Indiana. Application June 30, 1932. Serial No. 620,117. 6 Claims. (Cl. 183-120.)

1. The process of conditioning air, comprising subjecting the air to direct contact with a non-volatile mineral oil which is at a temperature below the dew point of the air, and removing separated moisture in contact with the oil.

1,974,146. CUBE TRAY HEATING UNIT. Arthur A. Barnes, Philadelphia, Pa. Application Dec. 15, 1930. Serial No. 502,569. 2 Claims. (Cl. 62-108.5.)

1. In combination with a chilling unit having tray shelves and ice cube trays disposed on said shelves, an electrical



1,974,146

heating unit comprised in each shelf to break the frozen bond existing between the tray and the shelf, an electrical energizing source for the heating units, and a switch between the source and each heating unit and yieldingly impelled to open position to be manually retained in closed position to energize each heating unit.

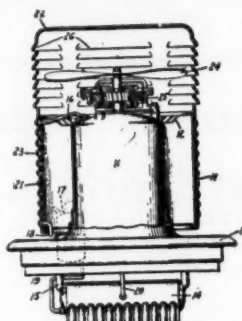
1,974,244. AIR CONDITIONING. William H. Lapp, Ames, Iowa. Application Dec. 31, 1931. Serial No. 584,250. 7 Claims. (Cl. 257-8.)

1. In apparatus of the character described, a chamber, underground pipes having an inlet communicating with said chamber at one end thereof and an outlet communicating with the chamber at the other end of said chamber, a box communicating with said outlet pipe, a power driven fan rotatably mounted in the open end of said box, a heating coil disposed within said box adjacent the outlet of said pipe, an adjustable deflector secured to said box adjacent said fan, and thermostatically controlled heating means for supplying a heating fluid to the coil within said box.

1,974,317. REFRIGERATING MACHINE. Christian Steenstrup, Schenectady, N. Y., assignor to General Electric Co., a corporation of New York. Application April 8, 1933. Serial No. 665,145. 4 Claims. (Cl. 62-115.)

1. A refrigerating machine including a compressor casing, a plurality of heat radiating fins secured to said casing, a metallic shell surrounding said casing and

ins and secured to said fins, a second shell surrounding and in contact with said first named shell having a portion extending above said casing and having a helically corrugated lower portion forming a refrigerant condenser between said



1,974,317

shells, and means including a motor driven fan arranged above said casing for producing a circulation of air around said fins and past said condenser to cool said condenser and said casing.

REISSUE

19,322. REFRIGERATION. Chelton H. Tanger, deceased, late of Evansville, Ind., by Serrel, Inc., New York, N. Y., a corporation of Delaware, assignee. Original No. 1,873,508, dated Aug. 23, 1932. Serial No. 474,152, Aug. 9, 1930. Application for reissue July 19, 1934. Serial No. 736,110. 17 Claims. (Cl. 62-108.5.)

14. A device for forming ice including a lower metal member and an upper member of flexible non-metallic material, said upper member having depending partition forming projections of flexible non-metallic material.

Georgia Power Co.
Compiles Rules for
Mail Advertising

ATLANTA — Rules for compiling effective direct-mail advertising lists from prospect lists as set forth by Georgia Power Company are as follows:

"1. List only names of those persons who are prospects for what you have to sell. Don't go by hearsay. The best prospects are those with whom you have had at least one interview.

"2. Don't guess at the spelling of a name. If it's spelled 'Smythe,' then don't spell it 'Smith.'

"3. Take care to write down the exact initials. Don't include the prospect if you don't know his or her initials.

"4. Always indicate the correct prefix to your prospect's name—whether Mr., Mrs., Dr., Rev., or Miss.

"5. If there is home delivery of mail in your town, don't just write 'Cherry Street,' but make it '1065 Cherry Street.'

"6. Indicate the name of the town in which your prospect lives."

In preparing commercial prospect lists Georgia Power says:

"1. Don't abbreviate like this—'Wm. Spgs. Found.,' as this may mean 'Warm Springs Foundation,' or it may mean 'Wm. Spiegler's Foundry.'

"2. Don't include the prospect unless you can give the name and initials of the buyer or person to whom the direct mail should go."

200 Enroll for Boston
Air Conditioning School

BOSTON—Fifteen states are now represented by men enrolled in the University Extension home study course on air conditioning which was added last year by the Massachusetts Department of Education to its correspondence subjects.

Students from as far west as Salt Lake City, Utah, and Sacramento, Calif., and from Asheville, N. C., and Brunswick, Ga., have enrolled for the course.

Also approximately 200 have enrolled in an evening lecture class on air conditioning organized by State University Extension at Massachusetts Institute of Technology.

The report of the standards unit of the Consumers Board states that present descriptive terms "consist largely of superlatives piled up to such an extent as to make it entirely unsafe for a consumer to take them at face value, else he would be misled into believing the goods to be of a much higher quality than they actually are."

McPherson Will Head
U. S. Rubber Division

NEW YORK CITY—H. A. Everlien, sales manager, mechanical goods division, U. S. Rubber Products, Inc., has announced the appointment of H. S. McPherson as manager of mechanical sales in the St. Louis district.

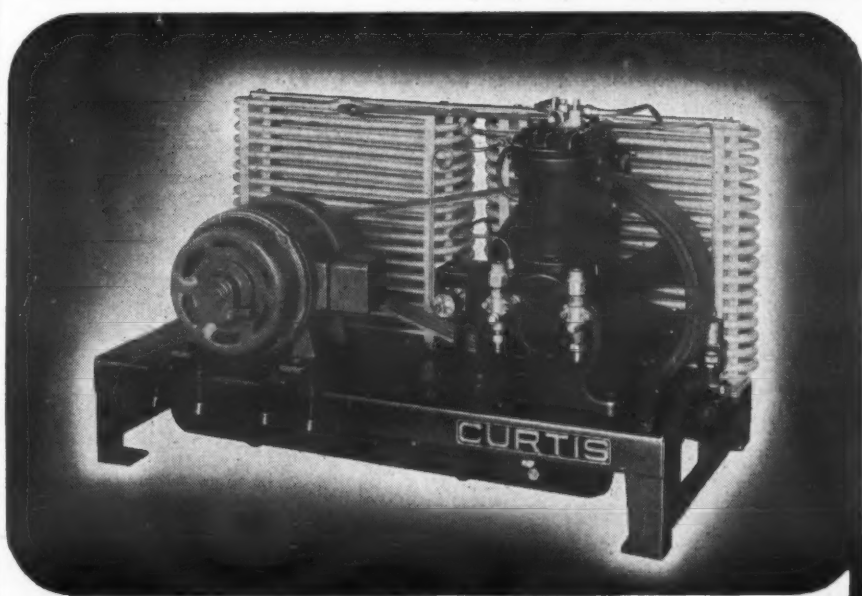
Mr. McPherson, who has been with the company for over 15 years, was formerly in charge of mechanical sales in the Boston district.

W. G. Mueller has been promoted to manager of mechanical sales, Boston branch, U. S. Rubber Products, Inc.

The Matheson Co.
EAST RUTHERFORD
N. J.

SULFUR DIOXIDE
METHYL CHLORIDE
ISOBUTANE
ETHYL CHLORIDE
AMMONIA
CARBON DIOXIDE
REFRIGERATOR OILS

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STORE
178 MARTINE AVE
WHITE PLAINS, N. Y.



CURTIS REFRIGERATION

Units to fit every need

CURTIS, one of the oldest cooled—reflecting 80 years compressor manufacturers, engineering, designing and offers one of the most complete lines of refrigerating units—1/6th to 2 H. P. air cooled; 1/3rd to 5 H. P. water

80
SUCCESSFUL
YEARS
ESTABLISHED
1854

Some desirable territories are still open for reliable distributors. Write for details.

CURTIS

Curtis Refrigerating Machine Co.
Division of Curtis Manufacturing Co.
1912 Kienlen Ave., St. Louis, U. S. A.
518H Hudson Terminal New York City

A
LIBERAL
REWARD

A LIBERAL reward will be paid for information leading to proof of the existence of air-conditioning systems prior to May 3, 1918 in which air, by-passed around a dehumidifier, was mixed with conditioned air and delivered directly to a room; or prior to December 22, 1922 in which automatically varied volumes of dehumidified air and unconditioned recirculated air were mixed.

Address:

G. K., P. O. Box 187, Madison Square Station
New York, N. Y.

STATISTICS

World Sales of 18 Makes Total 79,705 Household Units For August, 1934

The following 13 member companies of the Refrigeration Division of the National Electrical Manufacturers Association (Nema) reported sales for August, 1934: Crosley Radio Corp., Frigidaire Corp., General Electric Co., Gibson Electric Refrigerator Corp., Kelvinator Corp., Leonard Refrigerator Co., Norge Corp., Servel, Inc., Stewart-Warner Corp., Sunbeam Electric Mfg. Co., Uniflow Mfg. Co., Universal Cooler Corp., and Westinghouse Electric & Mfg. Co. Member companies not reporting included: Apex Elec. & Mfg. Co., Jomoco, Inc., Merchant & Evans Co., and Sparks-Withington Co. The sales of the reporting companies do, however, include units manufactured for the following concerns: Major Appliance Corp., Montgomery Ward & Co., Potter Refrigerator Corp., Sears, Roebuck & Co., and Truscon Steel Co.

HOUSEHOLD		Domestic Sales		Canadian Sales		Other Foreign Sales	
Lacquer (Exterior) Cabinets with Systems		Quantity	Value	Quantity	Value	Quantity	Value
1. Under 4.00 cubic feet.	7,644	\$ 398,083	26	\$ 1,300	399	\$ 22,546	
2. 4 to 4.99 cubic feet.	15,410	994,226	290	19,118	3,260	223,968	
3. 5 to 5.99 cubic feet.	8,849	740,655	218	17,096	1,019	84,273	
4. 6 to 6.99 cubic feet.	6,056	567,553	137	12,697	456	43,062	
5. 7 to 7.99 cubic feet.	9,711	1,079,642	94	11,322	549	62,259	
6. 8 to 8.99 cubic feet.	951	112,199	7	787	76	9,205	
7. 10 to 12.99 cubic feet.	60	12,386	....	....	17	3,569	
8. 13 to 24.00 cubic feet.	21	5,006	....	....	1	235	
9. Total Lacquer	48,702	3,969,755	772	62,320	5,777	449,117	
Porcelain (Exterior) Cabinets with Systems							
10. Under 4.99 cubic feet.	1,414	118,346	1	38	455	37,998	
11. 5 to 5.99 cubic feet.	688	64,893	2	349	234	22,387	
12. 6 to 6.99 cubic feet.	2,141	246,094	4	457	488	55,696	
13. 7 to 7.99 cubic feet.	3,665	450,572	4	523	279	34,877	
14. 8 to 8.99 cubic feet.	1,463	227,057	1	170	257	36,130	
15. 10 to 12.99 cubic feet.	410	74,081	2	380	165	28,891	
16. 13 to 24.00 cubic feet.	267	62,920	....	....	25	7,037	
17. Total Porcelain	10,048	1,243,963	14	1,967	1,903	223,016	
18. Total Lines 9 and 17	58,750	5,153,718	786	64,287	7,680	672,133	
19. Separate Systems	9,085	387,882	....	....	2,652	194,306	
20. Separate Household Low Sides	263	5,304	54	701	425	8,726	
21. Total Lines 18, 19, 20	68,108	....	840	....	10,757	....
22. High Sides, 1/4 hp or Less	505	28,025	52	3,013	842	49,203	
23. Cabinets—No Systems	66	6,451	....	....	4	440	
24. Total Household	....	5,581,380	....	68,001	....	924,812	
COMMERCIAL							
25. Water Coolers with High Sides	1,693	163,162	1	92	40	3,937	
26. Water Coolers with No High Sides	105	5,511	....	....	3	159	
27. Ice Cream Cabinets with High Sides	267	37,467	10	1,346	131	17,062	
28. Ice Cream Cabinets with No High Sides	289	37,964	4	425	41	5,865	
29. Beverage Coolers with High Sides	1,197	88,929	9	706	14	1,153	
30. Beverage Coolers with No High Sides	251	16,787	1	55	7	327	
31. Room Coolers with High Sides	140	30,006	....	....	14	2,243	
32. Room Coolers with No High Sides	243	30,898	....	....	21	2,613	
33. 1/4 to 1/2 hp. Incl.	1,981	176,690	45	3,875	1,677	126,349	
34. Above 1/2 to 1 hp. Incl.	1,551	179,683	24	3,077	466	51,564	
35. Above 1 to 5 hp. Incl.	969	155,439	15	2,916	94	17,283	
36. Above 5 to 10 hp. Incl.	45	22,793	....	....	9	5,519	
37. Above 10 hp.	17	9,770	....	....	....	....
38. Total Lines 33, 34, 35, 36, and 37	4,563	....	84	....	2,246	....
39. Total Lines 25, 27, 29, 31, and 38	7,860	....	104	....	2,445	....
40. Extra Commercial Low Sides	4,343	145,870	165	4,880	1,270	39,189	
41. Miscellaneous Cases and Cabinets	61	15,218	19	2,550	7	1,891	
42. Total Commercial	....	1,116,186	....	19,922	....	275,161	
43. Total—Household and Commercial	....	\$6,697,566	....	\$ 87,923	....	\$1,199,973	

Sales to Dealers Show Increase In 4 States

Although sales to distributors and dealers in the United States during August showed a drop off of about 33 per cent from the July figure of 101,511 units, increases were reported for the states of Alabama, California, Idaho, and Texas. It is interesting to note that these four states represent the South, Far West, Mid West, and South West, respectively, no two being in the same territorial section.

The per cent of decrease in world sales was considerably less than that for the United States as exports to Canada and other foreign countries showed an increase of 18 per cent over July. The export figure of 11,597 is the highest reported for Nema companies in any month of the current year.

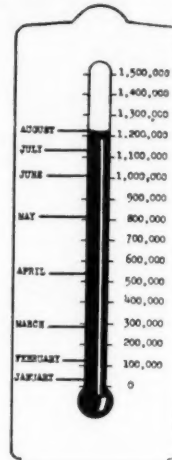
States and Territories	Quantity of Household Low Sides
Alabama	1,831
Arizona	207
Arkansas	543
California	4,697
Colorado	526
Connecticut	1,092
Delaware	144
District of Columbia	666
Florida	1,312
Georgia	3,512
Idaho	159
Illinois	4,982
Indiana	1,666
Iowa	701
Kansas	750
Kentucky	749
Louisiana	595
Maine	301
Maryland	1,234
Massachusetts	3,246
Michigan	2,115
Minnesota	707
Mississippi	537
Missouri	1,867
Montana	269
Nebraska	489
Nevada	59
New Hampshire	291
New Jersey	3,333
New Mexico	94
New York	9,593
North Carolina	579
North Dakota	109
Ohio	3,690
Oklahoma	733
Oregon	369
Pennsylvania	4,716
Rhode Island	369
South Carolina	342
South Dakota	125
Tennessee	1,833
Texas	3,937
Utah	209
Vermont	165
Virginia	813
Washington	570
West Virginia	453
Wisconsin	818
Wyoming	81
Total United States	68,108
Total Canada	840
Other Foreign (Including U. S. Possessions)	10,757
Total for World	79,705

Comparative Sales by Months for 1933-34

	1934		1933	
	Monthly Sales	Cumulative Sales	Monthly Sales	Cumulative Sales
January Totals	39,100	39,100	19,400	19,400
Nema Only	34,514	34,514	16,351	16,351
February Totals	84,900	124,000	36,200	55,600
Nema Only	75,007	109,521	30,422	46,779
March Totals	153,300	277,300	59,200	114,800
Nema Only	135,470	244,991	49,823	96,596
April Totals	262,600	539,900	127,400	242,200
Nema Only	232,124	477,115	107,182	203,778
May Totals	276,100	816,000	208,200	450,400
Nema Only	244,178	721,293	175,119	378,897
June Totals	192,900	1,008,900	208,700	659,100
Nema Only	170,544	891,837	175,550	554,447
July Totals	125,900	1,134,800	127,300	786,400
Nema Only	111,313	1,003,150	107,081	661,528
August Totals	90,200	1,225,000	98,100	884,500
Nema Only	79,705	1,082,855	82,495	744,023

The above tabulation shows sales to distributors and dealers by all industry manufacturers in comparison with those by members of the Refrigeration Division of the National Electrical Manufacturers Association (Nema). Sales by months and also cumulative totals are shown for both groups for 1934 and 1933.

The thermometer-type chart pictures the point reached by all-industry unit sales of household electric refrigerators in the various months of 1934.



BUYER'S GUIDE

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SPECIAL ADVERTISING RATE (this column only)—\$12.00 per space.

Payment is required monthly in advance to obtain this special low rate.

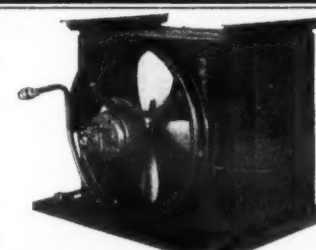
Minimum Contract for this column—13 insertions in consecutive issues.



A NEW COMPACT VALVE

Model 73-R Solenoid Valve, built to meet the exacting demands of the Refrigeration and Air Conditioning Industry. Drop forged body—heavy stamped cover, crackle finish. Easily installed, small and neat in appearance. Impact type plunger. For use with Freon, Methyl Chloride and similar installations. Can also be supplied for the control of water. Working pressure 200 lbs. 5/32" port. Write for details.

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Manifolded for FREON

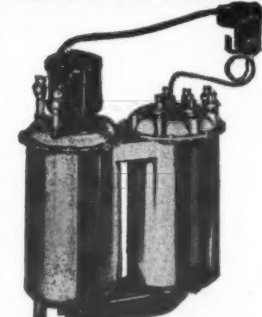
and for a greater than 20° differential between air and refrigerant

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Main Offices and Factory, TRENTON, NEW JERSEY
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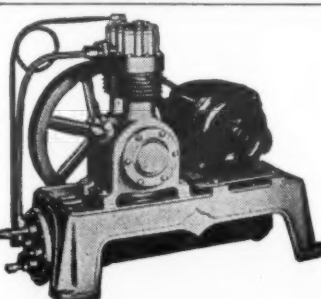


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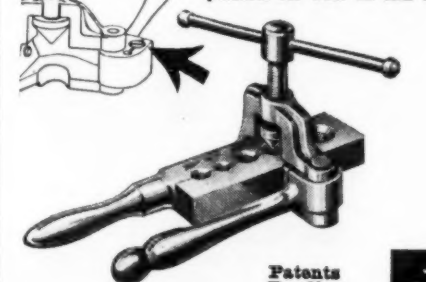
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Cable "Start" Richmond, Indiana (factory) Since 1927
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NOTE EXPANSION SCREW IN HEAD OF CAM LEVER

A slight turn of expansion screw in clamping lever compensates for wear on cam face.



HENRY Flaring Tool

Speedy and rugged. Has carbonized hardened clamping blocks. Adjustable cam lever exerts greatest pressure opposite tube. For 1/4, 5/16, 3/8, 1/2 and 5/8-in. tubing.

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Specialized Valves & Fittings for Refrigeration
1001-19 N. Spaulding Ave., Chicago

WRITE FOR BULLETINS DESCRIBING HENRY REFRIGERATION SPECIALTIES

Distributor & Dealer Inventories for August, 1934

HOUSEHOLD Lacquer (Exterior) Cabinets with Systems			Factory, Branch & Warehouse		U. S. INVENTORIES Distributors		Dealers		Production Quantity
	Quantity	Value	Quantity	Value	Quantity	Value			
1. Under 4.00 cubic feet.....	5,291	\$ 295,691	1,959	\$ 101,183	502	\$ 25,584	13,047		
2. 4 to 4.99 cubic feet.....	33,524	2,292,515	13,405	868,463	11,022	706,620	8,670		
3. 5 to 5.99 cubic feet.....	34,011	2,954,909	12,560	1,028,110	8,872	712,304	17,451		
4. 6 to 6.99 cubic feet.....	21,180	1,954,859	7,159	680,042	7,749	685,930	1,749		
5. 7 to 7.99 cubic feet.....	24,818	2,956,961	6,012	681,888	5,214	616,171	14,852		
6. 8 to 9.99 cubic feet.....	5,156	602,241	930	114,679	1,636	187,374	485		
7. 10 to 12.99 cubic feet.....	607	124,660	107	20,702	62	11,950	5		
8. 13 to 24.00 cubic feet.....	130	17,163	52	12,381	5	1,291	...		
9. Total Lacquer	124,717	11,153,002	*48,777	*3,991,675	35,062	2,947,224	*57,799		
Porcelain (Exterior) Cabinets with Systems									
10. Under 4.99 cubic feet.....	12,202	1,012,479	1,605	140,500	2,098	174,392	14		
11. 5 to 5.99 cubic feet.....	2,972	319,904	1,151	120,332	331	33,533	714		
12. 6 to 6.99 cubic feet.....	6,736	772,350	3,653	427,501	3,595	410,063	286		
13. 7 to 7.99 cubic feet.....	12,515	1,645,637	4,015	537,718	4,527	588,133	1,003		
14. 8 to 9.99 cubic feet.....	6,687	948,772	1,846	208,540	1,846	267,750	1,323		
15. 10 to 12.99 cubic feet.....	961	171,413	426	82,529	538	98,002	115		
16. 13 to 24.00 cubic feet.....	1,649	364,199	339	84,564	202	47,216	45		
17. Total Porcelain	43,722	5,234,754	*16,798	*2,067,233	13,137	1,619,097	*3,850		
18. Total Lines 9 and 17.....	168,439	16,387,756	*65,575	*6,058,908	48,199	4,566,321	*61,649		
19. Separate Systems	23,501	1,181,286	54	4,050	.....	.....	19,836
20. Separate Household Low Sides.....	8,032	123,304	289	5,495	125	2,140	5,121		
21. Total Lines 18, 19, and 20.....	199,972	.....	*65,918	.....	48,324	.....	*86,606
22. High Sides, ¼ hp. or less.....	1,155	62,008	206	11,297	78	4,221	5,448		
23. Cabinets—No Systems	31,835	1,601,895	41	3,524	15	1,359	11,288		
24. Total Household .....	.....	19,356,771	.....	*6,063,274	.....	4,574,041	...
COMMERCIAL									
25. Water Coolers with High Sides	6,075	520,292	2,110	208,309	437	38,879	1,007		
26. Water Coolers with No High Sides.....	385	20,634	108	5,683	19	964	126		
27. Ice Cream Cabinets with High Sides.....	884	122,977	66	10,098	1	129	104		
28. Ice Cream Cabinets with No High Sides.....	2,105	279,363	183	22,391	12	1,430	44		
29. Beverage Coolers with High Sides.....	1,369	108,895	225	14,683	224	13,826	1,591		
30. Beverage Coolers with No High Sides.....	759	47,880	290	11,326	59	4,556	...		
31. Room Coolers with High Sides.....	1,879	526,578	243	53,125	155	31,663	53		
32. Room Coolers with No High Sides.....	1,363	481,976	182	20,862	102	9,568	182		
33. Extra High Sides ¼ to ½ hp. Incl.....	8,558	762,397	1,384	118,029	336	27,241	4,388		
34. Extra High Sides above ½ to 1 hp. Incl.....	2,972	378,951	1,172	157,236	297	37,791	809		
35. Extra High Sides above 1 to 5 hp. Incl.....	2,896	593,294	914	182,167	182	37,881	327		
36. Extra High Sides above 5 to 10 hp. Incl.....	131	77,824	13	7,979	2	1,112	15		
37. Extra High Sides above 10 hp.....	114	107,504	.....	.....	.....	.....	47
38. Total Lines 33, 34, 35, 36, and 37.....	14,671	.....	*3,545	.....	617	.....	*6,263
39. Total Lines 25, 27, 29, 31, and 38.....	24,878	.....	*6,189	.....	1,634	.....	*9,038
40. Extra Commercial Low Sides	21,932	641,580	3,337	120,572	757	21,105	1,721		
41. Miscellaneous Cases and Cabinets.....	759	217,654	164	51,175	31	8,580	25		
42. Total Commercial .....	.....	4,867,742	.....	988,737	.....	332,633	...
43. Total—Household and Commercial.....	.....	\$24,224,513	.....	*\$7,072,011	.....	\$4,806,679	.....	

QUESTIONS

Inception of the 'Shelvador'

No. 1870. (Canada)—"I am writing you to obtain some information concerning designs of refrigerator doors, especially with regard to storage spaces or shelves placed on the inner sides.

"If you will be so kind, I should like to know when such shelves, or storage spaces, were first built in refrigerator doors, and also by what company were they originally manufactured. It is immaterial how large a refrigerator first incorporated this feature as any size, ranging from the smallest to the largest commercial refrigerating room made, would be satisfactory.

"If you can advise me of a specific machine made some years ago, or forward a catalogue containing details of such a refrigerator, it would be of great assistance."

Answer: The original patent on a refrigerator door with shelves built on the inner side was applied for by

Frank West of Detroit and assigned to the Crosley Radio Corp. of Cincinnati, Ohio. The first refrigerators embodying this construction feature were built by the Crosley company late in 1931 and introduced in January, 1932. This is the principal feature of the present Crosley "Shelvador" electric refrigerator.

The same door construction is available in Canada in a refrigerator known as the "Hostess," manufactured by the Service Station Equipment Co., Toronto, Ontario, Canada.

New Cabinet Manufacturer

No. 1871. (Manufacturer, Ohio)—"We understand that there is a new concern starting to manufacture cabinets in Three Rivers, Mich.

"We wonder if you know of this concern, and if so please give us the name and if possible the person with whom we should get in touch so we can write them at once."

Answer: We have received no information regarding a new company manufacturing refrigerator cabinets in Three Rivers, Mich. We have made a check of companies operating in this vicinity and find two concerns which might possibly be equipped to enter this field. These are Pugsley Mfg. Co. and Eddy Paper Corp.,

both of Three Rivers.

It is just possible that you may have in mind the Hamilton Mfg. Co., Two Rivers, Wis., which has been active in the refrigerator cabinet business within the last two years.

Forced Convection Coolers

No. 1872. (Dealer, California)—"Please advise what system you would recommend for market equipment, this is to be used in show cases and walk-in boxes. Do you advise the forced-draft system or the natural direct-expansion coils?"

"Would the forced-draft system of the Fredericks show cases have a tendency to dry out meat?"

"It is impossible for us to get accurate first-hand information on this line, any information you could give us would be appreciated."

Answer: Both forced convection coolers and finned type coils are being used successfully for walk-in coolers and refrigerated display cases. Being a newer development, forced convection coolers have involved a number of new problems which refrigerating engineers are studying.

Excessive dehydration was one of the problems with forced convection coolers, but the engineers have found that this can be prevented by avoiding high velocities of the air, providing ample surface in the cooling coil so the refrigerant temperature need not be too low, and by proper balancing of the refrigeration load.

One of the best articles on forced convection cooling was one by M. C. Terry, manager of the commercial application department of Kelvinator Corp., which was published in Aug. 15 issue of ELECTRIC REFRIGERATION NEWS.

Universal Cooler Controls

No. 1873. (Distributor, Canada)—"During August we wrote you asking if you could put us in touch with a firm which could give us Universal Cooler parts. In reply you advised us to get in touch with the Universal Cooler Corp. in Brantford, Ontario.

"We were in touch with the Universal Cooler Corp. who referred us to their Montreal distributors, McDonald & Wilson Co., from which firm we are unable to get parts for some reason quite unknown to us.

"What we require are Cold Controls and we would appreciate your letting us know the name of some American independent concern which carries these parts."

Answer: Ordinarily, the Universal Cooler Corp. has been quite liberal in furnishing replacement parts for their machines. We have talked by telephone to Mr. F. J. Gleason, secretary of the Universal Cooler Corp., who suggests that you communicate with Mr. Dan Robertson, general manager of Universal Cooler Corp., Brantford, Ontario, Canada.

However, if you cannot secure the controls through the usual channels of the Universal Cooler Corp., we suggest that you get in touch with some of the following cold control manufacturers, giving complete details on your control requirements:

Automatic Reclosing Circuit Breaker Co. 1304 Indianola Ave., Columbus, Ohio.
Cutler-Hammer, Inc. 315 N. 12th St., Milwaukee, Wis.
General Electric Co. Industrial Dept., Schenectady, N. Y.
Penn Electric Switch Co. 200 E. Walnut St., Des Moines, Iowa.
C. J. Tagliabue Mfg. Co. Park & Nostrand Aves., Brooklyn, N. Y.

Replacement Parts

No. 1874. (Manufacturers Agent, Missouri)—"We are interested in buying Frigidaire and Kelvinator parts that may be made by some independent companies and if one of your advertisers is among this number, we would appreciate your putting them in touch with us."

Answer: Suppliers of replacement parts for electric refrigerators are listed on page 302 of the 1934 REFRIGERATION DIRECTORY. The supply companies listed below were advertisers in the DIRECTORY.

Harry Alter Co. 1728 S. Michigan Ave., Chicago, Ill.
Home Appliance Service Co., Inc. 714 W. Market St., Greensboro, N. C.
Iceless Refrigeration Accessories Co. 2401 Chestnut St., Philadelphia, Pa.
Melchior, Armstrong, Dessau Co. 300 Fourth Ave., New York City.
George Monjian Co. 360 E. Grand Ave., Chicago, Ill.
Refrigeration Service, Inc. 3109 Beverly Blvd., Los Angeles, Calif.
Refrigeration Service Laboratories, Inc. 418 Rush St., Chicago, Ill.
Refrigeration Supply Co. 1212 Tremont St., Boston, Mass.

Removing Majestic Dome

No. 1875. (Electrical Supplier, Oklahoma)—"The members of our refrigeration department have been very much interested in the series of articles on servicing obsolete types of refrigerators; more especially the article in the last issue on the Standard Model Majestic.

"In view of the delay in securing exchange of units now existing, we would greatly appreciate an article very shortly on the Majestic Sealed Model Units. The thing that is stumping us at present is how to remove

the dome from the sealed unit. Our service men believe that if they can remove and replace this dome satisfactorily, they will be able to take care of the majority of cases where the trouble is inside the dome."

Answer: An article on servicing the Majestic hermetic compressor was published in the Aug. 16, 1933, issue of ELECTRIC REFRIGERATION NEWS. Although this article did not discuss removal of the dome, it did give a number of helpful suggestions for servicing the Majestic hermetic in the field. If we are able to obtain data on removing the dome and rebuilding the compressor, it will be discussed in a later issue of the News.

Refrigeration Schools

No. 1876. (Student, New York)—"I am a young man, interested in refrigeration and would like information concerning schools on refrigeration.

"Could you please send me information on such schools which have practical work and which are located in New York City and vicinity?"

Answer: (See below.)

No. 1877. (Printer, New York)—"The Electric League of Niagara Frontier referred me to you concerning a suitable school of high standing, teaching electrical refrigeration and air conditioning.

"In my present circumstances it is impossible for me to attend a college teaching these subjects such as Massachusetts Institute of Technology. My course would have to be limited to within six months or a year. I have in mind such a school as Coyne Electrical School in Chicago or Milwaukee School of Engineering at Milwaukee.

"I should like your opinion on schools such as these and whether it is advisable to take such a short course of approximately three months as Coyne offers. Other schools and information concerning them will be appreciated."

Answer: We do not attempt to pass upon, or approve, schools teaching electric refrigeration. The following institutions offer refrigeration and air-conditioning courses as indicated and we suggest directing inquiries to those most advantageously located:

Refrigeration Schools

Utilities Engineering Institute 404 N. Wells St., Chicago, Ill. (Also branch in New York City.)
Milwaukee School of Engineering 1020 N. Broadway, Milwaukee, Wis.
School of Engineering of Milwaukee E. Wells & N. Jackson Sts., Chicago, Ill.
Greer College of Electric Refrigeration 2024 S. Wabash Ave., Chicago, Ill.
O. F. Schoeck School Alton, Ill.
Buffalo Technical Institute, Inc. 604 Washington St., Buffalo, N. Y.
Seneca Vocational High 666 E. Delavan Ave., Buffalo, N. Y.
Cass Technical High School 2421 Second Blvd., Detroit, Mich.
American School 58th & Drexel, Chicago, Ill.
Hemphill Diesel Engineering Schools 2121 San Fernando Rd., Los Angeles, Calif.
Refrigeration Engineering Institute Warner Theater Bldg., Youngstown, Ohio.
Refrigeration Training School 100 N. Prospect Ave., Sturgis, Mich.
Electric Refrigeration School 817 Thirteenth St., Washington, D. C.
Massachusetts Institute of Technology Boston, Mass.

Air-Conditioning Schools

Utilities Engineering Institute 404 N. Wells St., Chicago, Ill. (Branch in New York City.)
Air-Conditioning Engineers Society 121 N. Clark St., Chicago, Ill.
International Correspondence Schools Scranton, Pa.
Massachusetts Institute of Technology Boston, Mass.
New York Y.M.C.A. Schools 5 W. 63rd St., New York, N. Y.
Rutgers University New Brunswick, N. J.
O. F. Schoeck School Alton, Ill.

Household Specifications

No. 1878. (Massachusetts)—"Can you furnish me with a list of manufacturers of electric refrigerators for domestic use: their names, addresses, and type of box, and if possible, retail prices."

Answer: Detailed specifications covering 285 models of 37 makes of household electric refrigerators together with names of the manufacturers were published in the May 30 issue of ELECTRIC REFRIGERATION NEWS. Included was information concerning dimensions, storage capacities and finishes of cabinets, size and type of refrigerating machine used, and also net weights and retail prices.

Data on Old Models

No. 1879. (Distributor, New York)—"We would appreciate information on the complete lines of models of Kelvinator, Frigidaire, and Copeland for the years 1927 to and including 1931.

"Frankly, we are planning an export division for reconditioned boxes in the above makes and in the compilation of a circular for the trade, we need the specifications of all models of the years 1927-1931.

"If you are not able to supply the above, would you be so kind as to inform us where we can get the necessary information which is very important to us in our work."

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RATES: Fifty words or less, one insertion \$2.00, additional words four cents each. Three insertions \$5.00, additional words ten cents each.

PAYMENT in advance is required for advertising in this column.

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Address Box No. 644, Electric Refrigeration News.

POSITIONS WANTED

SALES ENGINEER, 29 years of age, college graduate, three years' experience with large refrigerating manufacturer in factory branch and field work desires new connection in refrigeration or air-conditioning. Capable of laying out and supervising installations and also assisting in sales work either retail or wholesale. Box 643.

INDEPENDENT SERVICE COMPANIES

HALETRIC thermostat repair service. B & B, G.E., Cutler-Hammer, Penn. Ranco, Tag., etc. Float valve needles reground and polished. Expansion valves repaired. Gas service, Ethyl, Methyl, Iso-Butane, Sulphur. Your cylinder or ours. Competitive prices. Distributors of "Flawless Brand" tubing. Haletric Laboratory, 1793 Lakeview Road, Cleveland, Ohio.

Trained Men Available

When in need of practical, trained shop mechanics, installation or service men, patronize this FREE Placement Bureau. We have competent, trained graduates available in every locality, to meet your requirements. With or without experience. No charge to the men or to you. Write, phone or wire.

Utilities Engineering Institute

Placement Division
Wells at Kinzie Street, Chicago

Answer: The first specifications of household electric refrigerators were published in the Nov. 9, 1927, issue of ELECTRIC REFRIGERATION NEWS and included models of the Kelvinator and Copeland lines, but not Frigidaire. In the April 25, 1928, issue specifications were given for refrigerating machines only, not including details of the lines by cabinet sizes. Data for all three companies were included.

Specifications for Kelvinator, Frigidaire, and Copeland for 1929 were published in the Jan. 2, 1929, issue of the News, including refrigerating machine data, range of cabinet sizes, and other information. Specifications for 1930 were given in the Dec. 3, 1930, issue, Buyers' Guide Section (cabinet data), and in the Dec. 17, 1930, issue, Buyers Guide Section (refrigerating machine data). Complete detailed specifications for 1931 appeared in the annual Directory Section of the Jan. 14, 1931, issue of the News.

Copies of these issues are available at 10 cents each.

McCORD REFRIGERATION PRODUCTS

COMMERCIAL EVAPORATORS

DOMESTIC EVAPORATORS

CONDENSERS

METFLUX ICE TRAYS

SPIRAL FINNED TUBING

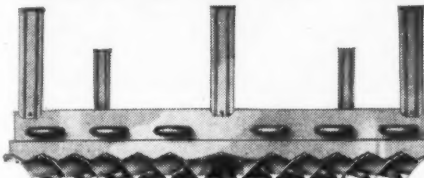
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DETROIT, MICH.

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The NEW Eye Appealing Method of Cooling Walk-In Refrigerators

STYLE & RESULTS

Fin Coils and Drip Pans Engineered in an Integral Unit—Saves Installation Cost and Operating Cost

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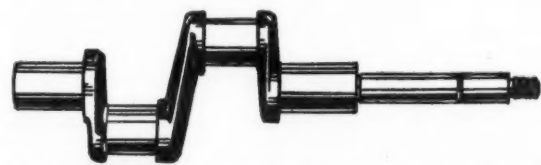


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THE TRADEMARK OF FOUR PACE SETTERS IN COIL EFFICIENCY

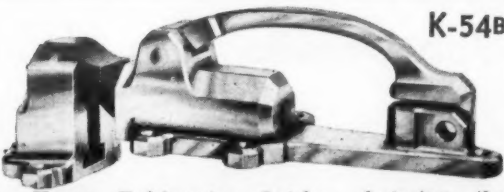
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1934 Refrigeration Directory and Market Data Book

A complete list of manufacturers of refrigeration systems, equipment, parts, materials, supplies, production and service tools, related products, companion merchandise, material handling and delivery equipment, and other devices and services used by the industry. Also detailed specifications of all models of all makes of household and commercial refrigeration equipment and all available statistical data on past sales of refrigeration equipment and the potential future market.

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